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[In these pages dimension and weight are expressed in terms of the Metric System, and temperature in degrees of the Centigrade Scale.]

Clinical Lectures.

ARTICLE I.

NOTES OF PROF. S. J. JONES' CLINIC AT THE ILLINOIS CHARITABLE EYE AND EAR INFIRMARY. Reported by F. C. SCHAEFER, M.D., Asst. Aural Surgeon.

Eczema.—This little girl aged seven years, has an unsightly eruption extending from the concha into the external meatus. It forms a scab or crust on the skin from which there escapes a thin yellowish fluid. The integument in the vicinity of the eruption is rendered highly sensitive by reason of the hyperæmia occasioned by this morbid condition, which is accompanied by more or less pruritus. The itching sensation is sometimes so severe as to lead the child to seek relief by rubbing the surface with the finger, and thus produce friction which only intensifies the process of inflammation, and in some instances produces a diffuse inflammation involving the entire meatus. Upon inquiry, the child's mother states that the eruption has existed three months, that a number of little watery "blisters" first appeared, which soon run together and formed this mass of incrustation, which

has probably been thickened by the addition of considerable dirt. This is the usual history of eczema of the ear.

Eczema is classed among the vesicular skin diseases, of which there are three grades, the acute, sub-acute and chronic. The acute is the most common form met with in this locality, and occurs usually in children suffering from defective nutrition, in those who are poorly fed, and in the large class who have inherited a strumous diathesis. It is sometimes brought on by uncleanliness or by the pernicious habit of picking the ears. Occasionally it appears in the adult, resulting from the application of irritating substances to the part involved.

The treatment will vary with the grade of the affection. In the acute form local sedatives are indicated. If accompanied by a burning sensation with considerable tendency to inflammation, mild astringents should be applied to the part.

The sub-acute grade will call for about the same treatment, with the addition of moderate stimulation. In the chronic form emollients are useful to soften the scales, and more decided stimulating applications are recommended. Frequent lubricating of the parts with vaseline to prevent drying and hardening of the secretions, and to protect the diseased parts from the irritating effects of the atmosphere, will be found to be servicable. Constitutional treatment is often required in these cases.

Acute diffuse inflammation of the external meatus.—This patient states that there has been an intolerable itching sensation in her right ear during the last two weeks, but two days since this gave way to an intense aching pain, and feeling of fullness accompained by noises in the ear, and that her hearing became suddenly impaired. Upon inspection the external auditory canal is found almost closed by swollen integument. The tragus is thickened and the entrance to the meatus is rendered almost impervious by the tumefied condition of the tissues. These parts are very sensitive to the touch. It would be impossible to obtain a view of the membrana tympani without causing a great deal of suffering to the patient as the thickened walls of the meatus encroach upon the caliber of the canal and would have to be violently pressed apart in order to introduce a speculum, a proceeding uncalled for, and that would aggravate the disease.

The entire internal surface of the meatus is very sensitive and reddened by inflammation. Could a view of the membrana tympani be obtained, its outer surface would doubtless present a somewhat similar appearance.

This is a case of acute, diffuse inflammation of the external meatus, which can be promptly relieved by judicious treatment. Should it be neglected or improperly treated, the inflammation might pass into the suppurative stage and involve more or less destruction of tissue, macerating the membrana tympani and sometimes producing perforation of it, or the acridity of the pus by reason of its irritating qualities, might give rise to the formation of furuncles or polypi. Not infrequently, a low, chronic form of suppurative inflammation supervenes, with an exceedingly offensive discharge, bringing the tissues into a low state of vitality favorable for the lodgment, upon their surfaces, of a parasitic fungus, aspergillus, of which three species have been found in the ear of man, viz: aspergillus flavus, a. glaucus, a. nigricans.

In another class of cases the acute symptoms gradually merge into a chronic inflammation, which has for its sequelæ the suppression of the function of the ceruminous glands and the destruction of the vitality of the epidermis owing to the long continued dry condition resulting ultimately in its desquamation. Frequently a cast of the meatus is thrown off and sometimes exostoses develop. The pain accompanying the acute inflammation is very severe. The explanation for this is to be found in the fact that the integument lining the external auditory canal, in its lower part, lies in such intimate contact with the bone as to almost make it a periosteum, and an inflammatory process here must be similar to a periostitis, which is always extremely painful on account of the compactnesss of structure which is surrounded by bony walls that cannot yield to pressure.

The cause of this condition can frequently be traced to a habit of picking or rubbing the ears with hair-pins and ear-scoops that many people resort to in the belief that proper personal care requires that they should do so, or, as is at times done, to relieve itching in the ears. Ear wax is a natural secretion and serves a useful part in the economy, by keeping the parts pliable and pre-

venting the admission of insects. In health, the ears require no special care.

A prolific cause of this inflammation is the instillation of various oils and ear drops of an irritating character for the relief of ear-ache.

Eczema sometimes is an active cause of diffuse inflammation of the meatus.

Violent efforts made to remove impacted cerumen or foreign bodies from the auditory canal will be followed by acute, diffuse inflammation. It may also be occasioned by inflammation extending from the middle ear in case of suppurative inflammation of that part.

Treatment at first should be antiphlogistic. Scarify the inflamed surface, or apply leeches to the tragus, for at this point the vessels which supply the canal and outer layer of the membrana tympani are more surely reached. In addition to this, advise warm pediluvia and cathartics. A continuous stream of warm water is to be directed into the meatus, or in lieu of this, the meatus, if yet pervious, may be filled with warm water containing morphine in solution; the application to be frequently repeated and retained with a plug of cotton.

In the chronic form of the disease, thorough cleanliness is to be enjoined and the parts lubricated with vaseline. Should there be pain present, vesication over the mastoid process will be advisable. The suppurative cases are to be treated in the same way with the addition of astringent applications frequently applied, after frequent and thorough cleansing of the parts.

The external meatus, as a consequence of disease, is usually quite sensitive and patients frequently ask the question, what shall be done to protect their ears from cold. As a general thing little, if any, precautionary measures need be resorted to. The meatus forms a natural angle that protects its inner portion and the membrana tympani from the more dangerous effects liable to be produced by the vicissitudes of the atmosphere, yet much comfort may be given the patient by lubricating the meatus with vaseline or diluted glycerine to lubricate the parts and to supply the place of ear wax, the secretion of which has been suppressed by the inflammatory process, and to allay accompanying itching of

the meatus. Fifteen grains of carbolic acid dissolved in an ounce of rose-water will aid greatly in allaying itching and destroying the growth, if aspergillus be present, and the meatus be filled twice a day with the solution or moistened with it at shorter intervals.

The very common practice of filling the external meatus with cotton wool on all occasions is objectionable.

As the circulation of the blood in many of the diseases of the ear is defective, exposure of the affected part to a low temperature of the atmosphere, or to high winds may produce discomfort or otherwise do harm. Slight protection to the ear while so exposed may be advantageous, but indiscriminate muffling of the external ear is likely to do more harm than good.

For therapeutic use, where cotton is required, this which has been recently added to the armamentarium of the aural surgeon under the names of borated cotton, iodized cotton, and absorbant cotton, will frequently be found to be both convenient and serviceable.

THE late *concours* at Rush Medical College, for the purpose of filling the position of Lecturer on Gynecology in the spring faculty, was rewarded with a large success, considering the number and standing of the competitors and the general excellence of their public efforts. The auditorium of the upper college lecture-room was well filled on each evening of the course, by an attentive congregation of medical gentlemen and students. The position was awarded to Dr. R. Stansbury Sutton, of Pittsburgh, who, it is understood, will make his residence hereafter in this city. Among the most effective of the lectures delivered were those of Dr. A. J. Stone, of St. Paul, Minn., and of Dr. D. T. Nelson, of Chicago. Dr. Stone's candidature was practically annulled by his announced inability to remove to Chicago for the purpose of attending to the duties of the position, but his lecture was one which reflected the greatest credit upon himself, and which produced a most gratifying impression upon the professional gentlemen who were so fortunate as to hear it.

Original Communications.

ARTICLE II.

SELECT TOPICS OF MODERN SURGERY. ILLUSTRATED BY CASES FROM HOSPITAL SERVICE AND PRIVATE PRACTICE OF DRS. E. W. LEE AND CHR. FENGER.

I. *The Radical Operation for Non-strangulated Hernia.* Illustrated by a case in the practice of Dr. Lee.

The history of surgery gives evidence that from the earliest times the radical cure of hernia has been a prime desideratum. As a result, a number of operations have been proposed for its accomplishment. It has been the common fate of all these operations—the ingenious ones of Gerdy, Wutzer and Rottmund not excepted—to be abandoned by the profession. The reason of this has been partly the danger of peritonitis, partly the uncertainty and instability of the results.

In trying to cure a hernia radically, we must accomplish two objects—first, the obliteration of the sac of the hernia; and second, the obliteration (umbilical, ventral, crural hernia) or sufficient diminution in width (inguinal hernia) of the ring (crural, umbilical, external inguinal) of the hernia, *i. e.*, the opening in the fibrous tissues of the wall of the abdomen. The older methods of obliteration of the sac, as actual cautery, castration, excision with or without ligature of the neck of the sac, introduction of foreign bodies into the sac with a view to cause adhesive inflammation, etc., were intended to effect radical cure themselves; the narrowing of the ring was left to nature. Most of the patients so operated upon died in consequence, while many of the survivors had early return of the hernia through the open ring and by the side of the obliterated sac. Thus professional

attention was directed strongly to the importance of the ring of the hernia, at the beginning of the present century. The obliteration or plugging of the ring was sought to be effected by transplantation of a flap of skin (one successful case, Jameson), or through invagination of the skin of the scrotum (Gerdy, Wutzer, Rothmund, Wells, etc.) The latter method has been practiced extensively. Although relatively bloodless, it is not without danger of peritonitis, and the plugging of the ring is very imperfect and uncertain.

A more rational way of obliterating the columns of the fibrous ring was, in 1863, introduced by Wood, of London. He unites the columns of the crural ring with sutures, introduced subcutaneously through a small incision in the scrotum. The uncertainty of carrying the sutures into the columns, guided only by the feeling of the fingers, is obvious, and probably this is the reason why relatively few surgeons have adopted this method.

It is to Lister's antiseptic method of operating, and to his antiseptic dressings, that we are indebted for the last important step toward effective radical cure for non-constricted hernia.

Czerny, the most gifted of Billroth's pupils, has, in a daring but strictly scientific way, proposed and successfully employed a new method, the one used in the operation upon the patient whose case will be presently described.

The main features of the operation are: a free incision over the whole length of the hernia; exposure of the sac; reduction of the contents of this, if possible, without opening it, but with opening if this be necessary; ligature of the neck of the sac and amputation of its fundus; reduction of the ligatured stump of the sack into the abdomen, the fundus being removed or allowed to remain in its place. Next the fibrous columns of the ring are dissected out and a suture of strong catgut is passed through them, bringing them together; after which the external wound is closed over drainage tubes and Lister's dressing applied.

Previous methods were applicable only to reducible hernias, and could not be used without great danger, if even the smallest portion of the contents was adherent to the sack.

In the case now to be related, the operation was made upon an irreducible hernia. The patient, E. C., thirty-one years old, a

switchman, noticed, in 1864, a small inguinal hernia on the right side; it was of the size of a large marble. It only came out occasionally with efforts at jumping or other violent straining effort; and he was obliged always to replace it manually. It caused no pain. In the course of years it grew to the size of a duck's egg, but he could always return it easily.

On June 7th, 1879, while forcing over a ground switch with great effort, the hernia came down much larger than ever before, forming a tumor in the scrotum seven inches long by three and a half or four inches broad. He went home and to bed, tried to reduce the hernia and succeeded partially, but a considerable mass remained protruding and in the scrotum. The next morning there was some pain in the tumor, and a physician attempted to reduce it, with the patient under anæsthesia, but in vain. Two days later, Dr. Lee was called, and drew a little serous fluid from the tumor with the aspirator, and then attempted to reduce, but without success. There remained an irreducible hernia, four inches long by three inches wide. A few days afterward, a careful examination was made, when the tumor was found of the same size as before, a little tender on pressure, giving a dull percussion sound, over its whole surface; the lower part of the tumor movable from side to side, the upper, outer, narrower part fixed to and filling the external inguinal ring (?); no fluctuation being discoverable anywhere. The contents of the tumor were felt to be an uneven, somewhat nodular mass, over which the integuments, skin, dartos and fascia were movable. There had never been any hiccough, vomiting or constipation, or other evidence of strangulation of gut or even irritation of peritoneum or contents of the peritoneal cavity.

The diagnosis arrived at was irreducible inguinal hernia omentalis (epiplocele). The patient, unable to do his work and earn his living, begged that something might be done to relieve him. As no bandage or truss would enable him to do the heavy work required by his vocation, it was explained to him that the only means by which he could regain his health and former ability to work, was an operation for the radical cure of the hernia. The dangers and chances were laid before him, and he consented to the operation. Five days previous to the operation he was put

to bed, given a dose of castor oil every day, and kept on a diet of liquid food, consisting of beef tea and milk in moderate quantity.

On the 30th of July, at 3 p. m., the operation was performed by Dr. Lee at the patient's home. There were present Drs. Fenger, Isham, Bridge, Saulsbury and Goldspohn.

The pubis had been shaved and the abdomen washed carefully with soap and carbolized water.

The anæsthesia was induced with ether, and every step of the operation was made under a powerful spray of five per cent. carbolic acid solution.

An incision six inches long was made from above the neck of the hernia and the external ring down to the scrotum. The superficial fascia, tunica, dartos and the fascia of the external oblique, were cut through with only some venous hæmorrhage. The sac of the hernia, thus laid bare, was dissected loose from the surrounding tissues and opened, when about an ounce of reddish, but clear, serous fluid escaped. From this moment, and during the rest of the operation in the sac, the neck of the latter was firmly compressed with the fingers to prevent blood or other fluid from escaping into the abdominal cavity. Through the dilated opening the sac was found to contain a large quantity of somewhat indurated and œdematous omentum, but no intestine. The omentum was then divided at the neck of the hernia into three equal parts by means of ligatures, no knife being used, and separately ligatured firmly, carbolized catgut being the material used. The mass was then cut off one centimeter from the ligatures, and the stump pushed through the ring into the abdomen. The next step was to carefully separate the empty sac from the spermatic cord, when one strong catgut ligature was passed around the neck, and the peripheral part of the sac cut off.

The fibrous columns of the external and inguinal ring were next laid bare, the opening being about four ctm. long by one and a half ctm. broad, and, by means of two curved needles threaded with *one* strong, large and long piece of catgut, a continuous, uninterrupted suture, resembling the lacing of a shoe, was passed through the columns 0.5 ctm. from their free border. The needles were always passed from within outwards, and alternated from side to side, so that the catguts crossed each other as in the lacing of a

shoe. In this way the external inguinal ring was closed, the columns being drawn together firmly, a space being left at the internal inferior point of the ring just sufficient to accommodate the spermatic cord without strangulation. After hæmorrhage had ceased, a large drainage tube was laid in the bed of the wound, and the integument closed over it with carbolized silk ligatures.

A perfect Lister antiseptic dressing was applied over the whole hypogastric region, with an opening for the penis. The dressing was fastened with a double spica, and the whole bandage covered with a large, elastic, pure rubber bandage, with a view to exercise an uniform elastic pressure over the wound as well as over the whole lower part of the abdomen.

The patient was put to bed, with a pillow under the knees, to maintain them in a semi-flexed position. Laudanum was given to prevent the bowels from moving.

On August 1st the wound was re-dressed. There was no fever and no pain in the abdomen.

August 5th the dressings were re-applied. The bowels had moved for the first time since the operation. There was a very little discharge into the dressings.

On August 7th the patient had a slight chill in the morning. The pulse was 100; temperature (101½ F.), 38.7°. There was some pain in the middle of the wound, and a hard swelling could be felt between the latter and the radix penis, about three ctm. below the external inguinal ring. The lower half of the drainage tube was taken out.

August 9th there was found to be but little discharge in the dressings; fever had been absent twenty-four hours; the swelling mentioned had increased in size and was steadily painful. During the night the pain suddenly ceased, and when the next day (August 10) the dressings were removed, they were found to be considerably infiltrated with pus; pus was issuing from the canal of the drainage tube; the swelling had considerably decreased in size, and pressure upon it caused pus to well up from the canal of the tube.

August 12th, two small pieces of substance, resembling in size and appearance rice grains, came from the wound.

By the 17th of August the little swelling had disappeared; there was some discharge through the drainage tube, and the patient felt well.

On the 26th day of August, the discharge having nearly ceased, the upper and last half of the drainage tube was removed.

By September 1st the wound was nearly healed and the patient was allowed to get up.

On September 9th he went to work, it being the 41st day after the operation. The wound was entirely healed.

He wore a light truss for a month after going to work, but it caused a slight excoriation of the epithelial covering of the scar, and had to be dispensed with.

For (now) two months he has not worn any support over the scar.

This man is now able, and has been, to pursue his occupation without inconvenience. He can jump upon and off cars and perform all the movements of his body with freedom and without inconvenience.

The actual condition of the part operated upon is now as follows: there is a reddish scar 10 ctm. long, reaching from the external inguinal ring to the scrotum; it is hard and firm, but not tender. When the man coughs, there is no greater protrusion at this point than of the skin covering the external ring of the opposite side.

Invaginate the skin of the scrotum, and pass the finger up toward or into the external ring, let the patient cough, and there is felt *less* pressure from within than may be felt on the left side, where no hernia ever existed.

So far, therefore, as may be judged from the patient's present condition, the success of the operation—the radical cure of the hernia—is complete.

Let us now consider the three main points of this new operation, namely, the treatment of the sac, the contents of the hernia, and the external fibrous ring in the wall of the abdomen.

(*a.*) *The Sac of the Hernia.*—Considering the sac as a part of the peritoneal cavity, the surgeon naturally desires to avoid opening it. This may be done in small reducible hernias with non-adherent sac, it being possible to loosen the sac without

opening it, and to pass it into the abdomen and to close up the fibrous ring outside of it. Czerny recommends this plan for small umbilical hernias only. We should not advise this practice in inguinal hernias for the following reasons: first, the reduced sac would be liable to pass down through the opening in the ring we are obliged to leave for the cord; second, in closing up the neck of the sac by means of sutures or ligatures, we would lose the advantage of a remedy in some cases by itself alone capable of producing radical cure of hernias, as has been seen after the operation for strangulated hernia.

Opening of the sac without exposure of its internal surface, can be done by dissecting loose the neck from its surroundings, applying single or double ligature in two places, and cutting through between these two. The upper ligatural part can then be returned to the abdomen, while the lower part, the fundus, is left in its place or extirpated entirely—which plan is preferable, as will appear further on.

Opening of the sac is of course inevitable whenever the hernia is wholly or partially irreducible. The danger from exposure of the internal wall of the sac is, in our opinion, mainly, if not entirely, obviated by the antiseptic method of operating. The statistics accessible to us give eleven cases (Czerny five, Socin five, our case one) with no peritonitis in any of them.

The contents of the sac disposed of in the way to be more fully described later, the neck of the sac ligatured and cut off and united with sutures (one of Czerny's cases) and pushed back into the abdomen, the question is what to do with the fundus—whether to leave it or remove it.

In four cases (Czerny three, our case one) where the sac was extirpated, the recovery was four times interrupted by the formation of an abscess near to or in the upper part of the scrotum, *i. e.*, in the place of the extirpated fundus of the sac. The abscess made its appearance the fifth day and the seventh day in one case each, and on the fourth week in two cases. In one of Czerny's cases he left the fundus, washing it out with a five per cent. solution of carbolic acid, and no abscess interrupted the recovery.*

* *Berlin Klin. Wochenschrift*, No. 23, 1879, Congress der Deutscher Gesellschaft für Chirurgie, Berlin, 18 April, 1879.

Czerny is inclined to ascribe the formation of abscess to the mechanical molestation of the tissues of the spermatic cord, in dissecting it loose from the frequently very adherent walls of the sac. He therefore suspects that this inflammation can be avoided by leaving the fundus in its place. But the fundus left in this manner might fill up afterward with serous fluid and form a cyst, with all the inconvenience of a hydrocele of the cord. To avoid this, an adhesive inflammation and obliteration of the sac might be obtained by cauterizing its inner surface with equal parts of carbolic acid and alcohol, as is the practice of Shunch in the radical operation for hydrocele.

Experience must in future decide whether it is desirable to leave and cauterize or to remove the fundus of the sac. Certainly an abscess should, if possible, be avoided, as it is very desirable that an uninterrupted healing by first intention should take place. Inflammation in the wound after this operation might endanger the results in a double way. The suppuration might extend up through the ring, along the ligatured neck, and cause fatal peritonitis. It would be less dangerous, but fatal enough to the success of the operation, if the suppuration around the sutures of the fibrous ring caused reopening of the latter and the discharge of the material of the former. Experience has not tended to emphasize this apprehension of danger. In all the observed (4) cases of abscess, this proved harmless to the life of the patient, as well as the final result of the operation.

(*b.*) *The Contents of the Hernia; Intestines, Omentum.*—An ansa of the intestines of an irreducible hernia may be adherent to the anterior wall of the sac, and requires the utmost caution in opening the sac. The intestine in most cases contains air as well as fæces and betrays its existence by tympanitis or want of absolute dullness on percussion. But we must bear in mind that there is always a possibility of finding, in spite of actual dullness on percussion, a knuckle of intestine close to the wall of the sac. No cut should be made without the director, and this must be used with such slight force as not to puncture an adherent gut. Never push the director through bleeding tissues, and always recognize the nature of the tissues covering the furrow of the instrument (connective tissue or muscular wall of the in-

testines) before cutting them through. Try to find a place where the wall of the sac can be seen to move over the surface of its contents and where it consequently can be opened without danger.

The sac being opened the intestine must be reduced. If not adhesions but a too narrow ring opposes the reduction we must dilate as in strangulated hernia. Adhesions require great care and skill in detaching the intestine. They (*i. e.*, adhesions) may be torn with two pairs of forceps, cut with a blunt pointed pair of straight or curved scissors, or with the knife, but they should be cut off (if at all) close to the wall of the sac, leaving parts of the latter in connection with them if they are very short. Every bleeding part of cut off adhesion must be ligated carefully with fine catgut (in one of Czerny's cases, six catgut ligatures were required) that not a drop of blood escapes from the surface of the reduced intestine.

The omentum may be reduced if it is healthy, and the reduction is easily done. Rather than dilate the neck and ring, we should ligate the pedicle of the omental mass, wholly if it is small, dividing it if voluminous, and then cut it off external to the ligatures. Catgut or carbolized silk may be used for this purpose.

(*c.*) *The Fibrous Ring.*—The interrupted sutures may be used. (One of Czerny's cases). A more efficient closure of the ring seems to be obtained by means of the uninterrupted suture (used in four of Czerny's cases, and in our own case), heretofore described. As the material for this suture we must recommend strong carbolized catgut. As the catgut after some time, the length of which is as yet unknown, becomes soft and gives way in the progressing process of absorption, it would be desirable if we could use a more resisting material, namely, strong silk ligatures. We would thus be more entitled to expect the crura of the fibrous ring to remain united for a longer time, probably long enough to effect permanent union, so as to avoid relapse of the hernia, or rather the coming out of a new one.

The well-known experience from intra-abdominal operations of later years would seem to permit the use of the silk. To further the solution of this problem Czerny made experiments with silk disinfected in different ways, testing it as to its power of produc-

ing decomposition, viz., formation of bacteria in Pasteur's fluid. His experiments seemed to prove that heavy silk thread boiled in a five per cent. solution of carbolic acid would be innocent, aseptic, and the material to use for the operation. In this way he made use of silk sutures in a case of inguinal hernia on both sides. The two operations were made at the same time on the 9th of March. On the 20th and 24th the sutures come out from the left and right sides respectively. Three months after the operation there was no hernia on the right side, but on the left a tumor as large as a pigeon's egg came out when the patient was made to cough. This one case, although not sufficient to decide the question finally, was so strong against the silk that we resorted to the catgut—the present case—and as the question now stands we shall continue to use it.

The future must decide whether the good results of this new operation for the radical cure of hernia are permanent. The small number of cases, and the short time that has elapsed since the operations, leave the question undecided.

Socin had four successful cases of operation for inguinal hernia, no relapses after one year. In one unsuccessful case the hernia returned after three months, and was operated upon the second time eleven months later. For Czerny's cases from 1875, we are yet unable to find any further information as to the stability of the results. That this stability will to a great extent be dependent upon the nature of the case, and the tissues of the patient is obvious. But it will scarcely be denied that, delicate, and often difficult as this operation is, the results will depend upon the care and skill of the operator to a much larger extent than in many other surgical operations. We should not advise any surgeon to perform this operation who is not a believer in, and thoroughly familiar with, the antiseptic method in all its smallest and often tedious details.

But following Lister's method of operating and after treatment, we believe the radical cure of hernia is as safe or safer than the old sub-cutaneous methods, and that we are indebted to Czerny for an ingenious, scientific and practicably valuable step toward the solution of the old question of the radical cure of non-strangulated ruptures.

ARTICLE III.

THE CINCHONA CURE FOR INTEMPERANCE. By CHAS. WARRINGTON EARLE, M.D., Professor of Diseases of Children, Woman's Medical College, and Physician to the Washingtonian Home, Chicago.

During the past two years those particularly interested in the subject of temperance in the city have had their attention repeatedly directed to an "Unfailing Cure for Drunkenness."

The discoverer says: "I can and do cure any case of drunkenness that comes to me." He also claims that drunkenness is a disease concerning which there should be no dispute, and that the drug cinchona, when pure, will certainly cure not only the disease but the appetite for alcoholics.

A pamphlet has been published, entitled "Dipsomania. Dr. D'Unger's Cinchona Rubra Cure for Drunkenness—Continuous or Periodical. What it is. How it was discovered. What it has done. Copyrighted, 1879, by Dr. D'Unger."

At the top of the cover of this pamphlet occurs this remarkable sentence: "To Physicians, $10 per pint, six concentrations." Concerning these concentrations I shall have something to say later in this paper.

This monograph on dipsomania has undoubtedly been circulated very widely, as in a letter dated June 9th, 1879, Scotland, I received the following clipping or extract:

> "At the Chicago Washingtonian Home, an institution for the restoration of inebriates, four patients of the worst description—and two of whom had been inmates of various reformatory institutions—have been completely cured by the use of my Cinchona Rubra. The patients can be seen personally by parties interested."

The letter was from a lady, who was greatly distressed in regard to a gentleman addicted to intemperance, and in closing, she said: "Do pray give me your unbiased opinion in regard to this alleged cure."

A number of newspapers, among them several devoted particularly to temperance, have commented freely, and, in many cases,

favorably upon the cure. The propriety of so-called temperance organs advocating the use of this drug will become apparent when an analysis of the compound is considered.

It was at the time when the Chicago *Tribune* was giving the cinchona its hearty endorsement and various inquiries were being addressed to me, as the physician of the Washingtonian Home, as to the potency of the drug in curing drunkenness; and after three or four men had come under my care who had been prescribed for by Dr. D'Unger, with no apparent benefit, that I published the following in the *Tribune* of this city:

THE CINCHONA CURE.

CHICAGO, December 28, 1878.

To the Editor of The Tribune:

I have very grave doubts as to the efficacy of the cure for drunkenness, advertised by Dr. D'Unger. God knows that no man has the interest of the drunkard more deeply at heart than I have, but I have already the history of several cases in which it has been of no use whatever, and, while willing to use everything which will liberate a victim from intemperance, I am fearful that an absolute injustice is being perpetrated by the wholesale and persistent advertisement of this so-called cure. As I have said, I have yet to meet with a case in which it has been of any benefit whatever; nevertheless in the hope that my experience has been exceptional, I solicit an interview or correspondence with those who claim to have received benefit from or been cured by the cinchona rubrum. If it is a specific, I desire to know it; if it is not, I must be allowed to warn my patients against trusting in it.

That there was an urgent and constant demand for a speedy, simple and sure cure for intemperance, one which should, as it were, operate mechanically, relieving the patient of all responsibility and apprehension, pain and struggling, not only among those who are victims of the habit, but among their anxious and sympathizing friends and relatives, was well known to me.

I knew, too, that the human mind, even in a healthy state, is so ready to believe to be true that which the human heart most earnestly desires to be so, that many eager and credulous sufferers, who could ill afford it, would try the so-called unfailing specific before its clinical worth was established.

I did not feel it to be my duty, at that time, to accuse any one of charlatanism, but it did seem that a great and *grievous* wrong was being perpetrated, and that too, mainly upon a class who already have been robbed and depleted to absolute poverty. I

therefore wrote the above note, and, that it might be read by those particularly interested, published it in a newspaper.

It was not necessary for me to publish anything for the medical profession—every physician who had read even portions of the published letters, particularly in the *Tribune*, had decided in his own mind that the discoverer's premises were erroneous from the very outset. The assertion that alcohol is not absorbed, but passes directly to the brain *over* the nerves is enough to startle any physician, and it is not probable that any medical man of intelligence would peruse, at any length, an article containing the following: "Alcohol stimulates the nerve center—that is the brain—by passing *over* the nerves externally. If a man were to get drunk by the action of liquor upon the nervous system as other things taken into the stomach act, it would be about four hours before he felt it." Vide *Inter-Ocean* report. At page 16 in the pamphlet alluded to before, under the head "My Theory of Dipsomania," the same statement is again made.

The above is what the discoverer of the cinchona cure tells us. The facts are, that every physiologist from Magendie's time, who in 1809 made conclusive experiments, to the present, including Carpenter, Flint, Dalton, Kuss and others have demonstrated that absorption took place only through the blood vessels or lymphatics.

We have been aware that different soluble and volatile matters were absorbed with greater rapidity than others, always, however, through their proper channels, and while nerves do not absorb alcohol in the sense of conveying it from the stomach to the brain, they are profoundly affected by it through their blood supply. It is pretty generally admitted, too, by physiologists, that the reason why alcohol has this power, is because of its great affinity for albumen—nervous tissues being highly albuminous readily unite with the alcohol, to the extent *possibly* of changing the chemical composition of nerve tissue, though this is not positively known. The ease and rapidity with which chloroform, ether, camphor and ammonia are taken into the system is familiar to all. They are very volatile, but enter the circulation by the same process that a substance does whose absorption takes four hours. We are told, however, that alcohol, like electricity, goes over the sensitive nerves straight to the nerve cells, reaching them in a few min-

utes. The discussion for one moment of such a theory is useless, an absolute waste of time, an insult to the host of patient and scientific workers in physiology. If the author of this new theory will take the trouble to ligate all the blood-vessels running to the brain in one of the inferior animals, he will find that neither alcohol or any of the more easily absorbed substances will produce any effect whatever upon that organ. Absorption never takes place in, or through, or *over* the nerves.

The pathology of this gentleman is, if possible, more unique than his physiology:

"Drunkenness is a disease, a disease specifically caused. You will perceive after examining this drawing, that right in the center of these cells—this is a drawing that I made of the nerve cells seen within the cerebellum or smaller brain, through a microscope of three hundred and fifty diameter power—well, that black mark represents a "yellow fermentive substance; that is found only in the brain of one addicted to the use of alcoholic drinks. This substance is created and deposited there through the action of the alcohol taken into the system, upon the sugar contained within the blood. That which we term the appetite is nothing more than an expression of the nutritive wants of these fermentive products. I believe that I am thoroughly posted in regard to the nervous system, and I am satisfied that I can cure every case of dipsomania if the patient will but take the first dose of my remedy. The effect of cinchona rubra is a cumulative one, and its action is to destroy the power of this yellow ferment."

The facts in pathology are as follows: The pathological changes within the brain have not been well determined—the post-mortem appearance never revealing a constant deposit. The mode in which a fatal termination arrives, the congested blood-vessels, or, perhaps the ruptured artery, and also that remarkable tendency to excessive serosity, giving rise to what has been called a "wet brain," have been frequently observed. Rokitansky, Rindfleisch, Wagner, Green, Delafield, and many others, with every facility and appliance, have spent years in the careful examination of diseased tissue. Some of these observers have made 30,000 autopsies, and have examined the brain with instruments of the highest magnifying power in the possession of the most experienced microscopists in the world, and yet no constant and undeviating change has ever been found. In acute alcoholic poisoning where death takes place within from thirty minutes to several hours, there is frequently no change

whatever in brain tissue. We find congestion of various organs and perhaps extravasations of blood in the brain and its membranes, but no change in nerve structure. Chronic alcoholic poisoning is however of a different nature. But even in this condition the patient may die of some other disease, or after a life-time of alcoholic excess die exhausted and comatose, and have in his brain and nervous system no change appreciable to the eye or microscope. A gentleman formerly under my care, and who was addicted not only to the alcohol but to the opium and chloral habit, fell dead on one of the streets of our city. The autopsy revealed the clot emptied from a ruptured blood-vessel but a minute microscopical examination showed no change or deposit in nerve cell. In other cases, however, we have found evidence of inflammation and hardening, particularly in what the eminent pathologist Virchow calls 'neuro-glia' (nerve cement) a kind of brain connective tissue. But it is not constant, and may be found in the brain of those not addicted to alcoholics.

Much has been published by this author to show that our knowledge of cinchona and its preparations has been greatly increased through his labors, but I am not aware that a single fact unknown to the profession, in regard to the therapeutical effect of this drug, has, up to this time, been advanced in any of his papers. The history of the drug is given in every work on Materia Medica, and its anti-periodic and tonic properties fully appreciated by all medical men of experience. That the red bark is as difficult to obtain as has been represented, and that the average pharmacist is so ignorant or dishonest as to make it impossible for the ordinary practitioner to obtain any of the cinchona preparations he may desire, I am not ready to believe. Indeed, all the statements made in regard to the scarcity of this drug, and in regard to a peculiar mode of manufacture, as well as its cumulative action, have been so put forward by the so called discoverer as to discourage any investigation on the part of the medical profession.

We have but few, if any, specifics, and medical men look with distrust and usually refuse to support any scheme *peculiar to, and in the interest of* any discoverer, or any theory based upon false, erroneous and antiquated hypotheses. The profession, however, is so ready for any scheme or plan, or medicine which will in any

measure stop the increase of drunkenness, that notwithstanding the erroneous views promulgated at the outset by Dr. D'Unger, if experience has demonstrated that the drug can in any considerable degree do what he claimed for it, I have no doubt that full credit will be given to the doctor for his discovery, and its use very generally recommended by the majority of medical men. The profession demanded, however, a patient trial at the bed-side before deciding upon the merits of the preparation. At the end of one year, during which I have had the opportunity of observing the effect of the medicine in more than fifty cases, and also having had three analyses made by competent chemists, it appears proper that I should make known to the profession, and to many non-professional inquirers, anxious and interested however, the results of this new treatment.

The medicine is dispensed in small flasks and is seen to be a reddish muddy mixture having a distinct bitter taste and resembling in both taste and appearance a mixture of one part of common *tr. cinchonæ co.* with three parts of water. Sometimes I have seen a darker preparation, especially in the hands of an older drunkard, which is evidently a near approach to a fluid ext. of cinchona. This was true of a specimen analyzed by Prof. Haines to which I shall again refer. The original preparation of bark is manufactured, or was during the early part of the year, by Messrs. Gale and Blocki. The concentrating process is known to the discoverer only. The preparation from Messrs. Gale and Blocki is, of course, an excellent one, a clear, dark colored fluid extract; the concentrated tincture, "*six concentrations, to physicians* $10.00 *per pint*," prepared only by the discoverer, is a muddy mixture which alcohol will dissolve, showing that the concentrating process is performed by the addition of Lake Michigan water.

This expensive (?) mixture, some specimens of which contain as small quantity of bitter principle as one grain to the teaspoonful of water and alcohol is dispensed at from $5.00 to $10.00 per pint, with the following explicit

DIRECTIONS FOR USING DR. D'UNGER'S PURE CINCHONA RUBRA.—The dose is a teaspoonful (shake the bottle well before each dose) once every three hours, the first dose always to be taken in the morning, before

anything is eaten or drank. But if this dose of a teaspoonful causes any fullness or pain in the head, or any buzzing or ringing in the ears, the next dose must be a little less, say five drops; and so on, whenever there is any annoyance in the head, the dose must be made a little less.

Always remember, the dose must never be more than a teaspoonful, nor oftener than once every three hours. But if there is any desire for a drink of any kind of liquor between the doses, the party must moisten his or her mouth with a few drops of the tincture, but none of it (the tincture) must be swallowed except at the regular dose time.

There is no danger in using this remedy, but it must be taken as directed to insure success.

It is to be given only when the party is awake.

R. D'UNGER, M.D., *Discoverer*,
Chicago, Illinois, U. S. A.

The following is a correct copy of a contract given to one of Dr. D'Unger's patients. The original is in my posession:

Received of —— —— fifteen dollars, three-fifths of twenty-five dollars to be paid me for curing Mr. —— of dipsomania, the understanding being that if, at the end of ninety days, the said party is not cured, I am to return the fifteen dollars now received, and in case he is cured, the said Mr —— to pay me the remaining $10, I to furnish all medicine required.

R. D'UNGER, M.D.

And now what are the results? Exactly what one would expect after administering whisky and water with a small quantity of some bitter principle. I do not say that not a single person to whom this drug has been administered has stopped the use of liquors; but I do say that not one with whom I have come in contact has, and in many cases its use has rekindled an old desire which by resolution and education had been nearly conquered. I do not say that in every case following the administration of this nostrum, injury to the patient has come; but I do say that in every case which has fallen under my observation, this has been the result.

But what do the victims say. *Results:* CURES: this is what the people demand. "The proof of the pudding is in the eating." And so we come to the actual results. A mother writing in regard to her son, says:

DR. EARLE, Chicago, *Sir:*—You request to know how the cinchona rubra acted in ——— case. He is not able to answer, so I will write for him.

I think he knows very little about it, although he has taken the medicine, and thinks he has derived "no benefit from it." He came home sick with delirium.

Mr. ————, a cutter by occupation, makes the following statement:

I purchased a bottle of Dr. D'Unger's medicine, for which I paid him $5. He administered a dose to me before I left his office. The following night I felt the need of my usual stimulant, and drank the entire bottle of cinchona rubra. It seemed to do me the good that whisky usually did.

DR. EARLE—*Dear Sir:* Having heard that you wished me to give you my experience with the use of D'Unger's preventative and sure cure for drunkenness—cinchona rubra—it gives me great pleasure to furnish you with the following "bona fide" account of the effect it had on me:

In the first place, I wish to state that I acquired an appetite for whisky at an early age, having drank it more or less every day for the past sixteen years, and only abstaining from it when my money gave out, or when my credit was exhausted.

One afternoon (now about nine months ago) I met an old acquaintance —a thorough drunkard—J——C——, on the corner of Madison and Clark streets, in this city, both of us being without money, and with no earthly chance of getting a drink. He said to me: "Dave, I have a new scheme. I will go and see my old friend, Joe Medill (proprietor of the *Tribune*), he will give us a note to Dr. D'Unger, which will get us a bottle of his medicine, and that will cure us of drinking. I know several it has cured." He got the note, went to Dr. D'Unger's office, and received the medicine, with instructions as to how we should take it, with the assurance from him (Dr. D'Unger) that it would take away and destroy altogether the appetite for intoxicating drinks of every description. "I have cured," he said, "thousands of drunkards who were a great deal worse cases than you are." Well, John and myself took a walk by the lake front, for we had no home or boarding-house where we could go and take our medicine. After we had taken two or three doses, John asked me how I felt, and I told him it was burning the throat and stomach out of me. And in response to the same question from me, he said he thought it was making him drunk. Well, sir, instead of it destroying my appetite for drink, as D'Unger said it would, it certainly increased my appetite, for I imagined I would never get back from the lake-front to some of the hell holes I was in the habit of frequenting to get a drink of beer or whisky: and the next morning after taking D'Unger's cinchona, I found myself in a rum-hole on Dearborn street, rolling on the floor, covered with sawdust, with no hat, and without any shoes, both being stolen while I lay there beastly drunk. This is the CURE and the EFFECT that Dr. D'Unger's medicine produced on me.

I am now seven months old as a sober man in the Washingtonian Home, and I am happy to say that I am redeemed from drunkenness. The ONLY CURE that there is in this world, in my opinion, for a drunkard, is to abstain from all intoxicating drinks of every description, and if any man wants to become a sober and reformed man, no matter how great or degraded a drunkard he may have been, the Washingtonian Home is the place for him, for here he receives a moral, sober and religious education.

I am, sir, yours respectfully, D. B. WHELAN.

The following statement is made by the son of a State official in regard to the purchase of the medicine for a friend in a distant city, and its results:

I paid $10 for the first bottle, $10 for the second, $7.50 for the third, and the same for the fourth. My friend's appetite and inclinations are exactly the same as before taking the four bottles of medicine.

Mr. ———, a business man of the city, and the one who kindly furnished me his original contract from Dr. D'Unger, gives his experience as follows:

Consulted the doctor in April; was guaranteed a cure, and took a bottle of medicine. Have taken at least one-half dozen bottles since, and my appetite for whisky is the same as before I commenced, although the medicine was taken regularly according to directions.

Still another:

I have taken three bottles without deriving any benefit whatever, and upon ordering the fourth, requested the doctor to make it "double strength." This did me no good, and my appetite is the same as ever.

Dr. C. W. EARLE—*Dear Sir:* In trying to cure my appetite or desire for alcohol in all its forms, I was induced to consult Dr. D'Unger, and while under his treatment used two bottles of his cinchona. The only effect it had on me was an appetizer, and in fact I really believe my desire was stronger for alcoholic stimulants after using it. I gave it a fair trial—drank no liquor of any kind while using it—and in all candor must say it had no beneficial effect in my case. It may have proved a benefit in other cases—I only speak for myself. Respectfully, —— ——

CHICAGO, June 12, 1879.

DR. EARLE—*Dear Sir:* This morning I made a statement to you regarding the effects of the use of cinchona rubra upon my nervous system, but did not state fully how I was induced to take it. The facts are these, viz: Several gentlemen of my acquaintance who had been in the habit of drinking to excess, recommended it to me, and stated that since they had used it, they had no desire or appetite whatever for alcoholic drinks. This was also supported by Dr. D'Unger's statement that about three thousand persons who had been cured by his treatment of cinchona rubra, but since my sad experience lately in whisky drinking, I know of at least one of the gentlemen who recommended it to me who has returned to whisky, and so far as I know is drunk to-day. It may suit some temperaments, but certainly did him no good, and my late conduct proves it has done me none.

Respectfully, —— ——

CHICAGO, February 18, 1879.

DR. EARLE—*Dear Sir:* About a month ago I was feeling very nervous, and I thought it would be a good plan to try Dr. D'Unger's medicine. Accordingly I called on him, at his rooms in the Palmer House, and told him my condition—that the least little thing would frighten me. He told me the

trouble was in the nerve center, and that no doubt his medicine would give me great relief. I told him that my financial condition was in a dilapidated condition, and that I could not afford to pay him $25 for his medicine. He asked me if I could raise $5, which I paid him and took a half-pint bottle of his remedy. I took it according to directions, and by the time I had finished the bottle I was in such a nervous condition that I had to stop work. It seemed to make me more nervous than I was before I commenced taking it. When the Doctor sold me the medicine for $5 he seemed to be doing an act of charity, as he assured me that each bottle cost him $7.50. I feel now that I made him a present of the money, and I have no hesitation in pronouncing him a first-class fraud, and a quack. His medicine is nothing more than a tonic, and I have often bought better ones for twenty-five cents.

Respectfully, —— ——

P. S.—Had not the *Tribune* backed this man up I never would have called on him at all.

CHICAGO, June 13, 1879.

DR. EARLE—*Dear Sir:* You will here find my limited experience in the use of Dr. D'Unger's cinchona cure. I commenced taking it about three months ago, and at first it made my head feel very badly, about the same as an over-dose of quinine would; making my head feel enlarged, and causing my ears to ring. Immediately after taking it I would feel also inclined to take a drink to relieve the feeling. It had the same effect that a drink of whisky would have—that is a desire to follow it with another drink. I complained of this to my wife, but she thought it only an excuse on my part to get rid of taking the medicine, and she concluded she would try it, but with the same result, excepting she did not desire to drink after it.

I then made up my mind that there was alcohol in it. I poured some of it in a dish, then set fire to it, and found it to burn as freely as any spirit. I am fully satisfied it could never cure me from drinking, and, as far as I am personally concerned, I consider it an unmitigated humbug, and will have none of it. I prefer the Washingtonian Home. I have part of a bottle left, which is at the disposal of any unfortunate who may wish to try it, and not be obliged to pay the exhorbitant $15 for a pint of his "infallible cure." After my wife trying it and experiencing the feeling which she did, she was perfectly willing for me to discontinue its use.

You are at liberty to use this as you may choose.

RESULTS FROM ABROAD.

DR. C. W. EARLE—*Dear Sir:* In response to your request, I will state that I have been a resident of Minneapolis until recently; that I am acquainted with Dr. D'Unger, both personally and by reputation; that I was Grand Worthy Chief Templar of the Order of Good Templars for two years; that during said time I was aware that Dr. D'Unger claimed a sovereign cure for intemperance (through the newspapers) in cinchona rubra, but with the fact in view that I was gathering all the facts possible for my temperance work, I have never known of one single authentic instance, where cinchona effected a permanent cure. Respectfully,

A. M. HUTCHINSON.

MINNEAPOLIS, Minn., Jan. 9, 1879.

CHAS. W. EARLE—*Dear Doctor:* I have delayed answering yours of the 3d inst., that I might see other physicians concerning the D'Unger treatment. I can only hear of two cases that have been treated here. One with no benefit and the other (colored) seemingly improved. Should I hear anything that would be of use to you, will be glad to send the information.

Yours very truly, F. A. DUNSMORE, M.D.

MINNEAPOLIS, MINN., DEC. 28, 1879.

C. W. EARLE, M.D.—*Dear Doctor:* Yours of the 20th inst. is now before me and since its reception I have had opportunity of asking a number of our best physicians for their results with D'Unger's cure by cinchona bark. No one reports success but majority have not made experiment, their excuse being their knowledge of the doctor. I have prescribed but with no knowlege of result, which I would certainly have received had there been any success. Very truly yours, F. A. DUNSMORE, M.D.

C. W. EARLE—*Dear Sir:* In reply to your inquiry concerning Dr. D'Unger and his pretended cure for drunkenness, permit me to say that I am now and have been for several years a resident of Minneapolis: that I am personally and well acquainted with Dr. D'Unger, and while I have been constantly engaged in the temperance work in that city, I do not know of one individual, nor have I heard of one who was cured, or who claimed to have been cured through the instrumentality of cinchona rubra. I once induced a man, who had been a hard drinker, to partake of the cinchona rubra, with a view of testing its merits, but the result was very unsatisfactory, the partaker complaining of an almost insatiable thirst for drink for several hours after taking the medicine. Very truly yours,

J. C. ERWIN,
Grand Sec'y Good Templars, Minn.

Dr. R. J. Patterson, formerly Professor of Medical jurisprudence, Chicago Medical College, and at present the proprietor and superintendent of Bellevue Place, a private institute for the treatment and cure of insane females, Batavia, Ill., furnishes me the history of a case which illustrates not only the usual (as far as I can learn) result, but the cost of making the trial:

A lady, the wife of an eminently respectable business gentleman, residing in a neighboring city, had become addicted to alcoholics—she was possibly a victim to the morphine habit—and had been committed to an asylum in the city several times but to no purpose. She seemed incurable. At last she came to Chicago, and was guaranteed a cure by Dr. D'Unger. One hundred dollars was paid for the guaranteed cure. While she was taking the medicine and under observation, it seemed to be all the stimulant necessary, but a few days after her return home she was again under the influence of alcoholics, and had recently been an inmate of Dr. Patterson's retreat.

RESULTS AT THE NATIONAL HOME FOR DISABLED SOLDIERS.

A short time after I published my card in the *Tribune*, the following was displayed as an advertisement:

DRUNKENNESS CURED—FACTS VS. FOLLY.—"NATIONAL HOME FOR DISABLED VOLUNTEER SOLDIERS, DAYTON, O., Jan. 6, 1879.—*Dr. D'Unger, Chicago:* After a fair trial of three months in two cases, seemingly incurable, I am glad to say that the result has been all that you could claim and all the most sanguine could hope for. Respectfully, E. F. BROWN, Governor."

A few days since I addressed a letter to Col. Brown, asking him if, after a continued trial of the remedy, he could still recommend it. His answer is probably explicit enough for even the discoverer of the so-called specific for drunkenness:

DAYTON, OHIO, Dec. 12, 1879.

DR. CHAS. W. EARLE, 37 Park ave., Chicago, Ill.—*Dear Sir:* Your favor of yesterday is received, and contents noted. I gave the cinchona a fair trial, and found it not better than any other advertised nostrum for the cure of intemperance. But it is proper to say I was not more sanguine of success when I wrote Dr. D'Unger in regard to the purchase of a quantity of the remedy than the facts seemed to warrant. He claimed for it that after three months' use the desire for all stimulants would pass away, and a cure be wrought, and in the two instances to which, doubtless, you refer, the men did keep sober that long. Thus far the remedy, or the men's resolution—it is hard to tell which—was efficacious, and thus far only was I sanguine. I do not hesitate now now to pronounce it a humbug.

Very respectfully yours, E. F. BROWN, Governor.

Although the uniformity of these results may be somewhat monotonous and lengthy, and the reader may long for the record of at least one reformation, it is impossible for us to give it. But as no record of so-called cures would be at all complete without slight reference to the published cures from among the inmates of the Washingtonian Home, I must be pardoned for giving the completed history of those four remarkable (?) cures, already referred to in the opening page of this paper and found at page fifteen in the doctor's treatise on dipsomania.

He says: "at the Chicago Washingtonian Home, four of the patients of the worst description * * * have been completely cured by the use of my cinchona rubra. These patients can be seen personally by parties interested." The only truth in the entire sentence is that they can be seen. I have seen them; all are or have been drunk. The history of case No. I. has been

partly given in one of the letters which appear above. A few days ago a commercial traveler called at the young gentleman's residence, in the central part of our State, and found that the day before, the young man while under the effect of liquor had demanded money of his father, and on being refused, the reformed man (?) "who may be seen by parties interested," proceeded to chastise his paternal relative with an ax handle.

CASE II. Was a Southern gentleman of position and education. He has made repeated efforts at reformation, but to no effect. At last a prominent business gentleman of this city became interested in him and at the commencement of the cinchona craze paid $25.00 for the reformation of the case we are considering. The patient professed to be greatly invigorated by the use of the medicine, and believed now his reformation complete. While this gentleman was taking the cinchona of Dr. D'Unger I asked him to compare it with an aqueous fluid extract of red bark made by Sargent & Co., of this city for my use. The preparation which this firm had made for me contained one pound of bark to the pint, and was absolutely free from alcohol. It was an exceedingly strong preparation, and would do for a patient all that Peruvian bark is capable of doing. He tasted this aqueous ext., and immediately said to me, "you haven't got it. It's not the thing." I had given him a dose of cinchona containing at least twenty times as much of the alkaloid as he was taking in the D'Unger preparation, but "it wasn't the thing." It did not contain from two to twenty-four per cent. of alcohol, which our reformer's tincture does, and hence these tears. After taking several bottles of this nostrum this gentleman engaged in business as a commercial traveler, I think, but soon returned to the city drunk. He entered Mercy hospital for a time but after leaving that institution again relapsed, and was reduced to a very pitiable condition. Upon my personal solicitation he was again admitted to the Home, and after a season resumed business. He is now in a distant State, and his future as regards drinking, is exactly what he makes it. He is a strong, robust man and can abstain from drink if he wills.

CASE III. Is a newspaper man, an editorial writer, one of those men who can paint with words; a most able, accomplished and

affable gentleman. He took the D'Unger mixture to remove the appetite. While taking it he was engaged in business, and at length determined to visit the East, his former home. He returned to this city drunk, his money squandered, his family discouraged. Repeated efforts were made by several to even sober him up without admitting him to the Washingtonian Home, but without success; and notwithstanding a large amount of abuse had been directed to the Home and its physician, and encomiums and peans of praise showered down on "the greatest benefactor of his race," as the discoverer of this cure has been called; notwithstanding all this, the man was again admitted and has again gone out and is at his accustomed work.

CASE IV. This man was the last one to hear from—the only one in the list in whom "the greatest discovery of the age" had not been demonstrated a failure. Three weeks ago his wife came to the institution referred to above and stated that he was drinking, and his position lost. He is now in the Home, where, to use the words of my friend D'Unger, "he may be seen by parties interested."

FROM THE MEDICAL JOURNALS.

The Edinburgh (Scotland) *Medical Journal* says of the cinchona, or Peruvian bark, remedy for drunkenness:

"Having been pressed by the friends of an unfortunate drunkard to try this new remedy, we administered it exactly as directed. We found the red bark a good tonic—this and nothing more. Our patient visited us some time after his convalescence, with a powerful odor of alcohol about him, and we ascertained from his distressed friends that he is pretty much what he was. We are inclined to think the whole thing another American dodge—and a very clever one. The moral is a sad one."

I beg leave to say to the editor of this journal that although this is an "American dodge," the medical profession is not responsible for it. The author of this humbug is not accredited by any medical society or association in our broad land.

The *Medical and Surgical Reporter*, of October 18th, says:

"We duly noted this vaunted cure on its announcement; we now chronicle its worthlessness. Dr. A. P. Hayne, superintendent of the Home of the Inebriates, San Francisco, writes thus of it, after full trial, in the *Western Lancet*:

"In no single instance have I found it to possess the slightest power in disgusting the patient with liquor or in any way diminishing his or her

appetite or craving for intoxicating drinks. On the contrary, they have all freely confessed to me that the anticipation and the pleasure of a drink was as strong as ever, In no case have I seen whisky refused when offered and in the majority it has been asked for. I know of an instance, in private practice, in which a person has stayed at home and taken the remedy all day, for several days in succession, and gone out in the evening only to be brought home thoroughly intoxicated.

ANALYSIS.

DR. EARLE—*My Dear Doctor:* The following is the result of the examination of the two specimens you left at the college:

The darkest colored liquid in the salt-mouth bottle contained of

Alcohol.....16 per cent.
Water.....85.19 per cent.

Total solid matter about six grains.

The liquid in the second bottle contained of

Alcohol..... 2.7 per cent.
Water.....98. per cent.

Total solid matter about four grains.

The percentage is by volume, and as water and alcohol mixed, contracts in volume the apparent discrepancy in the figures is explained.

The precipitates found in each specimen were, undoubtedly, caused by the addition of water to an alcoholic tincture as they were soluble in alcohol.

The amount of solid matter was so small that I did not attempt to ascertain the alkaloids present. Yours truly,

P. S. HAYES,
Prof. Chemistry, Woman's Medical College.

CHICAGO, Dec. 22, 1879.

PROF. C. W. EARLE, M.D.—*Dear Sir:* The sample of Dr. D'Unger's cinchona rubra preparation, which you placed in my hands for examination has been analyzed, and found to contain twenty-four per cent. of absolute alcohol. Yours truly, WALTER S. HAINES, M.D.,
Prof. of Chemistry and Toxicology,
Rush Medical College.

So much then for a specific which is persistently advertised as curing *every case* of drunkenness. The scheme is an exceedingly ingenious one. The patient, supposing he is supplied with a wonderfully powerful drug, possessing great tonic and antiperiodic properties, is really given an amount of alcohol varying from two to twenty-four per cent., the remainder of the nostrum being water. In this we have a very small amount of a bitter principle, presumably Peruvian bark. The first dose is *always to be taken* in the morning, before anything is eaten or drank—see printed instructions. This first dose of alcohol and water,

with a little bitter, before anything is eaten or drank, supplies the usual first drink which is so urgently demanded by one addicted to alcoholics. Then a teaspoonful every three hours, and if there is a desire for a drink of any kind of liquor between the doses, the party must moisten his or her mouth with a few drops of the tincture—twenty-four per cent. alcohol. Now, it is a well known fact that a man who has once acquired a taste for alcoholics, but by resolution and education of his moral sense has been enabled to reform, can not, with safety, taste a drop of any kind of liquor. In many of these cases a desire for liquor remains, and with the hope that this longing may be destroyed, many have been induced to take this prescription, and in *every case*, as far as my observation extends, they have again fallen. But I cannot prolong my paper. Much remains which might be said. *Every man*, with one exception, as far as I can learn (if I am mistaken I shall be glad to be corrected), whose reformation was published in the *Tribune*, is or has been drinking. I saw one in the County Hospital a few days since; he remained sober for three months, while taking the cure, and then drank ordinary whisky for nine months; and yet this man assured me that he was reformed; he had no taste for liquor, and yet he had been under its influence for nine months. Another man who formerly drank very largely of beer and who was occasionally unkind to his family, after a course of D'Unger tincture, had selected whisky as his beverage. He drank less whisky than beer, but beat his wife more. It would seem from this that beer is the better family drink. Others are taking the Peruvian tincture during the forenoon while business is active, changing to a different liquor after business hours.

Before concluding it is perhaps proper for me to say that I understand well that an *expose* of this humbug may be followed by a deluge of abuse and criticisms, which is not particularly pleasant. If, however, friends will bear in mind that every letter of abuse which has, up to this time, appeared, has come directly or indirectly from those who have been discharged, or have had friends discharged, from the Washingtonian Home, either on account of violation of some rule of discipline, or because they were not proper persons for us to retain, the animus of these letters will be seen. The committee on admission and discharge in that

institution cannot, and does not, expect to do its full duty without some very severe criticism.

CONCLUSIONS.

1. A chemical examination of the D'Unger preparation of so-called concentrated cinchona rubra shows it to be a diluted mixture of fluid extract of cinchona with water.

2. The amount of absolute alcohol is from two to twenty-four per cent.

3. The amount of bitter principle is as small, in some specimens as one grain to the drachm.

4. Engaged in a hospital practice where I have prescribed for nearly four hundred cases of alcoholism during the year, in addition to a private practice in which I see, perhaps, as many of these cases as the average physician, I have yet to see the first reformation from its use.

5. *In not a single case* has the use of this preparation disgusted the patient with the taste of alcohol.

6. The taste for stimulants in many cases remains long after a reformation is complete. Indeed, it is never lost in some, and a constant fight goes on between a desire for some form of stimulants and duty made plain by the education of the moral sense, to abstain from them. Numbers of these men, encouraged by the repeated assertion that this taste could be certainly and safely destroyed, have taken this medicine. In *every case* it has been the direct and only cause of these patients returning to their former sad and terrible habits. It has caused the downfall of every one who has come under my observation belonging to this class who has dared to touch it.

7. From a careful investigation of all the facts in my posession, I desire to place on record that it is my belief that this cinchona treatment has made more drunkards during the past year in this city than any one saloon.

ARTICLE IV.

EXPERT TESTIMONY IN THE HAYDEN TRIAL.

By WM. T. BELFIELD, M.D., Demonstrator of Physiology, Rush Medical College, Chicago.

On the afternoon of September 3, 1878, the dead body of Mary Stannard was found a short distance from her father's house, near Middletown, Conn. The county coroner was notified, an inquest held, and a post-mortem examination made. The latter revealed a large bruise on the side of the head, and a deep incised wound of the throat, whereby the common carotid artery and internal jugular vein of one side had been divided; also, a severe contusion of the left hand. There was found a small pool of blood beside the body. The examination, made by local physicians, appears to have been quite superficial and incomplete, eliciting no further information of value. Speculation, as to the perpetrator of the crime, was rife, some even including the theory of suicide. Various facts, however, directed suspicion toward a Rev. Mr. Hayden, a near neighbor, in whose family Mary had been employed as a domestic. It was more than hinted that Hayden had murdered the girl in order to prevent the natural consequences of a criminal intimacy with her; and it was suddenly noised abroad that Hayden had, on the day of the murder, purchased an ounce of arsenic of a Middletown druggist, ostensibly to poison rats.

A second examination of the remains was made eight days after death, conducted this time by men of established reputation. The uterus gave evidence of disease, but not of impregnation; the right ovary presented a tumor as large as a walnut, which was reserved for microscopical examination; the stomach, which exhibited the appearances of acute inflammation, and several other organs, were removed and sent to a chemist, who found 90 grains of undissolved arsenic in the stomach, and traces of the drug in the other organs. Besides this account of the examination, the prosecution has proven the purchase of the arsenic, by Hayden,

just previous to the murder; the girl's avowal to certain female friends of her pregnancy, and that, too, by Hayden; her statement that she had conversed with Hayden as to the best means for avoiding discovery; that Hayden had promised to procure for her some "quick medicine;" that she was going to meet him that afternoon to get this medicine; and finally, it is proven that she took with her a napkin and safety-pin, both articles having been found, indeed, on her dead body.

The theory of the prosecution is simply that she met Hayden as agreed, received from him a dose of arsenic, and was subsequently stabbed with his pocket-knife. The defense offer no theory of the murder, but content themselves with presenting objections to the evidence against the prisoner.

My purpose is to discuss the questions of expert testimony in their scientific aspect only, without regard to their legal bearing upon this trial.

First.—Is it possible to identify a given specimen of arsenic? Dr. E. S. Dana says, yes, within certain limits—a statement indorsed by Prof. Wormley, of Philadelphia. Dr. Dana affirms that the varying temperature at which the arsenic vapor is condensed, in the process of manufacture, and the varying fineness of the subsequent grinding, cause such diversity in the size of the crystals and in the proportion of fragments, as to render identification easy—basing his conclusions chiefly on three months' residence at the arsenic factories of England, and including the examination of one hundred and ten specimens.

This assertion, apparently so captivating and satisfactory, must be dismissed as "not proven." The arguments against it are several: the lack of experience in the examiner; the admission, by Dr. Dana himself, that several specimens may be subjected to similar conditions in the process of manufacture, and may hence be undistinguishable; the fact that the same jar may contain portions of different packages; the plausible assertion of practical millers, that the particles are often of variable fineness, even at a single grinding, in consequence of a lack of parallelism between the stones, and of irregularities in their surfaces. These facts force us to the conclusion that while there are wide differences in the microscopical appearances of different specimens of arsenic

which render *distinction* sometimes possible, yet *identification* is, as yet, impossible.

Second.—Is it possible to determine by the microscope that a given stain does or does not consist of human blood? On this point were obtained the opinions of two leading experts—Surgeon Woodward and Dr. Treadwell. It is a matter for congratulation and pride to microscopists, that these two gentlemen, representing, as they are reputed to do, the extremes of conservative and progressive opinion in this matter, should differ in no essential point as to the technicalities involved. The differences of opinion, important as they are, arise from the greater experience, and hence, very naturally, the greater caution of Col. Woodward. They agree that while the fresh blood of man can be generally distinguished from that of most of the domestic animals, and from that of all animals not mammals, yet there are certain animals whose blood-corpuscles are so nearly identical in size with those of man as to render positive distinction by the microscope impossible. Dr. Woodward, however, after alluding to the extreme variability in size of the corpuscles, in the same as well as in different individuals, objects to the assumption of $\frac{1}{3200}$ inch, or any other figure, as the exact average of human corpuscles. He insists upon the impossibility of knowing the actual average, since successive examinations give varying measurements. In consequence of this fact, and of the further impossibility of assigning limits to the possible size of individual corpuscles, he urges the necessity of extreme caution; and insists that when attempting to distinguish corpuscles whose asserted "averages" (usually Gulliver's) differ but little—those of man and the dog, for example—the microscopist shall speak in terms of probability only. These remarks apply to blood freshly drawn upon glass slides; the uncertainties are much increased if the corpuscles to be measured have been obtained from a stain upon cloth, a clot, etc., and have been artificially "restored" to their former size. In this case the chances of success are diminished by the introduction of a new and important source of inaccuracy.

These sentiments will, I think, meet the approval of every conscientious microscopist, in part at least even of Dr. Treadwell himself. For I have in my possession a letter from Dr. Tread-

well in which he expressly disclaims the ability either to identify dried human blood or to distinguish human from canine blood. Dr. Richardson, the well-known Philadelphia expert, makes the same statement for himself.

Dr. Woodward then proceeds to criticise Dr. Treadwell's assurance in basing an opinion upon an average of 15 corpuscles (found in the thumb-niche of Hayden's knife-blade) as entirely unwarranted. Dr. Treadwell maintains that the microscopist needs only 15 or 20 corpuscles in order to ascertain a fair average, and that he can "restore" dried corpuscles to their exact size. He then assumes the aggressive and criticizes Dr. Woodward's trust in the measurement of the photographic pictures of blood-corpuscles instead of the images as seen in the microscope.

This testimony is most opportune. In these days, when the laxity of the bench and the unscrupulous eagerness of the bar put a premium upon reckless extravagance of assertion and even falsehood on the part of expert witnesses; when a man is permitted to swear that he can not only distinguish human blood, but can even identify an individual by the size of the blood-corpuscles; in these days it is especially fortunate that we receive from the foremost microscopist in America—an unbiased witness—the exact state of microscopical science in this matter. It is to be hoped that the medical profession will do its part—a considerable one—in the propagation of the truth, and that there will result a more general knowledge of what the microscope can *not*, as well as what it *can* do, in the detection of crime. In this connection it is interesting to note, though hardly pertinent to the trial, the assertion of both Drs. Woodward and Treadwell, that it is impossible, in the present state of science, to diagnosticate disease by any abnormalities of appearance in the individual corpuscles. (Let me remind the medical reader that this is not a denial of ability to recognize leucocythæmia, remittent fever, etc., which are distinguished, not by the peculiarities of individual corpuscles, but by their relative numbers and the presence of spirillum). This is, however, rather damaging to the claims of certain gentlemen that in consumption, syphilis, and perhaps other diseases, the corpuscles present characteristic appearances.

Third.—Can an ordinary ovarian cyst, no larger than a walnut, occasion the symptoms of early pregnancy? Strangely enough, two Yale professors testified in the affirmative, although, as was subsequently proven, there is no authority nor recorded instance warranting such an assertion. Every medical man (except the two professors) knows that ovarian tumors usually attain a larger size before attracting the patient's attention to their presence and *then* not by causing symptoms of pregnancy, but by their pressure on other organs and by the local pressure of the abdominal walls. It is by no means seldom that one finds, post-mortem, ovarian cysts larger than the one in question, whose existence had never been suspected by the patient, nor even by her medical attendant.

Fourth.—How much blood would flow from an incised wound in the common carotid artery of a woman of average weight? And how much would be required to saturate firm earth to a depth of two inches, and over a circular area eight inches in diameter? The answers to these questions were, of course, speculative, indefinite and worthless.

Several other questions were discussed in the testimony which are unworthy of attention from a scientific standpoint, however well they may have served the purposes of the attorneys in browbeating witnesses, and confusing jurors. Such were these: Could arsenic, inserted into the stomach of a corpse, so permeate the tissues by osmotic action as to occur in appreciable quantity in the brain and other organs? Would arsenic, placed in the stomach after death, induce the reddening and other signs of inflammation which it causes in the living stomach?

Now, while the expert testimony adduced will probably have but little effect on the verdict in this trial, it will have a far-reaching influence in determining the medical jurisprudence of the coming decade. For, besides the authoritative expression of opinion on several important points, we have acquired a clearer appreciation of several serious defects in our present system of expert testimony—defects which contain a large element of peril to society in consequence of the very importance of the expert witness. For the expert on the witness-stand is sometimes a far more potent figure than either judge or jury, and reads the sen-

tence which the latter merely execute; hence the over-confident expert, even though of honest intentions, may be a more dangerous man to the community than the very criminal whom he prosecutes; while the dishonest expert is far more dangerous. I will enumerate a few of the evils which detract from the value of expert testimony as at present conducted:

First.—The employment of incompetent persons. This has received illustration not simply in the testimony with regard to the ovarian tumor, already referred to, but also in the preliminary trial, during which a *soi-disant* expert declared that a stain on a certain stone was made by blood. A subsequent examination by a competent microscopist demonstrated to the satisfaction even of the "expert" himself, that the supposed blood-corpuscles were the spores of a minute plant. Another witness at the preliminary trial denied the possibility of distinguishing human blood from that of a chicken.

Second. The employment of pretenders and charlatans.

Third. The partisan character of the testimony—the expert, like the lawyer, being hired by one party and being expected to testify first for the client, and second to the truth; the amount of the fee being in some cases measured by the expert's devotion to the cause and even dependent upon the result of the trial. Another unfortunate feature is the too frequent practice of introducing as evidence chemical experiments, microscopical exhibitions and the like, requiring special training and skill for their appreciation. To the juror of even average intelligence such a proceeding must savor largely of quackery, and must seem an attempt to manufacture reputation and authority by a cheap display of knowledge. The expert's testimony is procured because of his supposed familiarity with subjects of which the jurors are ignorant; and the weight carried by his evidence is dependent upon and largely proportionate to his skill and experience. In so far, therefore, as he attempts to fortify his evidence on some occult point by an appeal for corroboration to the jury, in just so far does he belittle himself and his opinion. True, it may occasionally happen that the expert can render intelligible to the jury the facts and laws upon which his opinion is based; yet the real object of the average scientific display in the court-room is not to enlighten

jurors upon a question at issue but rather to impress upon them a due sense of the expert's importance.

In consequence of such influences as these it has come to pass that the variability and contradictory nature of medical evidence is a mere byword in the mouths of attorneys. That is, indeed, a desperate case in which the assistance of a medical witness can not be secured, while the standard of chemical, microscopical and other expert testimony is far from satisfactory.

It might be presumed that the dishonest or incompetent expert would be detected by opposing experts, and so he is ultimately; yet that does not necessarily destroy his business. Many a quack doctor who claims to cure cancer, consumption or drunkenness, does a thriving business because conscientious, reputable physicians admit their utter inability to perform such miracles. And so the quack microscopist who claims the ability to identify human blood, or an individual's hair, or to do anything else which conscientious, reputable microscopists admit is impossible, is largely patronized by States' attorneys and others who desire to establish just such points. A heavy responsibility rests upon the legal profession in this matter; for attorneys do not hesitate to employ for the accomplishment of their ends witnesses, expert and other, of whose moral worthlessness they are convinced, and in whose statements they have themselves no confidence. An instance of this kind came to my ears by the personal confession of the attorney, a well-known lawyer of this city, and I have no doubt that he could have lengthened the chapter, had he desired.

It is eminently desirable that these abuses shall be corrected; yet to propose a remedy would be premature until the popular realization of the evil calls for it. Perhaps we shall ultimately find the best way to be that adopted in Germany, where scientific experts are government officers whose comfortable salaries, paid for life or during good behavior, remove the temptation to evil or rather transform it into an impulse for good.

ARTICLE V.

THE MECHANICAL ADAPTATION OF THE OBSTETRIC FORCEPS.

By PHILIP ADOLPHUS, M.D.

(During a joint discussion before the Chicago Medical Society, on Oct. 1, 1879, the following paper was read.)

I address you on the mechanical adaptation of the obstetric forceps. I understand this to apply to its mechanical adaptation to the obstetric canal of a woman in labor. Not the osseous pelvis merely, but the pelvis covered with soft parts, whose terminal outlet is not at the point of the coccyx, but at the anterior commissure of a greatly distended perineum—a distance of ten to twelve inches during labor.

The fundamental principles of midwifery are deduced from the correspondence between the fœtal dimensions and those of the pelvis.

The fœtal head, ovoidal in form, generally presents itself at the superior strait, with one of the extremities of an oblique diameter strongly flexed upon the trunk, so that its smallest diameter shall be parallel to the strait.

The central line traversed by the fœtus, from its entrance into the superior strait until its final exit from the vulva, whilst the patient is lying on the back, is a strongly marked curve, whose concavity is turned almost directly upward.

The contractions of the uterus, the abdominal muscles, and the resistance of the perineum, propel the child through the obstetric canal.

The inclined planes are supposed to play an important part in the mechanism of labor, for their direction has an immediate influence upon the movements which the head of the fœtus performs in the excavation.

The head, when arrested during labor by local conditions or general complications on the part of the mother, requires delivery by an instrument which must be adapted to the form and size of the child's head as well as to the anatomical conformation of the pelvis and soft parts of the parturient canal. The straight forceps, having merely a cephalic curve, are only employed when

the head is within the pelvis; it has short handles and is without shanks; therefore, it is a feeble instrument, either as a tractor, lever or compressor, being only useful when very little tractile power is required. But the long, double-curved forceps, having both the cephalic and pelvic curves, with lengthened blades and shanks, which can traverse the pelvis, from its entrance into the superior strait until its exit from the vulva, without inflicting injuries to the fœtus and the mother, is an instrument which, by its tractile, compressive and leverage powers, can and does save many a fœtus from perforation. It is the only instrument that joins mechanical adaptation to all portions of the parturient canal with power, and should be the only one adopted by the busy practitioner as worthy of confidence in all cases where forceps are indicated. It is a tractor, secondarily a compressor; occasionally limited lever-like movements are admissible, but rotation must not be performed with it, for the fœtus will rotate spontaneously within its blades during traction, owing to the anterior and posterior planes on either side of the cavity and the resistance of the floor of the pelvis.

The governing factors in the use of the long forceps are "anatomical knowledge, mechanical skill and common sense;" from these and experience the following rules have been deduced:

The position of the head does not determine the position of the blades; but the position of the blades is always determined by the anatomy of the mother.

Therefore, the forceps must be applied along the sides of the pelvis, and its pelvic curves must correspond to its curved axis.

Its introduction is governed by the direction of the obstetrical canal, the globular head of the child, and the cranial and pelvic curves of the instrument.

"In its introduction and removal it follows the circle of which it forms a part;" for it will always be coincident with the obstetric canal, from the superior strait to its outlet.

It is fit that the exact position of the head should be known, but such knowledge is not essential to its safe extraction; on the contrary it is not correct to apply the forceps to the sides of the fœtal head when its position is oblique or transverse, for if its pelvic curves are twisted, injury must be inflicted to the mother.

ARTICLE VI.

GYNÆCOLOGY IN THE SEVENTEENTH CENTURY.* By DR. JAMES I. TUCKER, Chicago.

The opinion is too generally held that gynæcology is a branch of medicine that lay fallow and unused in the middle ages and even in more recent times, but that this is not the case there are many indications to show, among them a treatise on the diseases of women which appeared in the seventeenth century.

The book is entitled: "*L'Hydre Féminine Combatve par la Nymphe pougoise ov Traité des Maladies des femmes, Gveries par les Eaux de Pougues, par M. Avgvstin Covrrade, Docteur en médecine. A Nevers par Iean Millot, imprimeur et libraire de Son Altesse Serenissime de Mantone. MDCXXXIV.*

The author of this work is Augustin Courrade, physician to the Princess Maria von Gouzaga, afterwards Queen of Poland, who resided sometimes in Paris, sometimes in Pougues, and at the latter place made use of the medicinal springs. This work which was printed in 1634 is really an advocate of the curative properties of the waters of Pougues, but it consists of two parts, the first of which treats of the diseases of women. According to the bombastic literary taste of the period, the book not only bears the allegorical title "*L'Hydre Feminine*," but the subject is also allegorically treated. The first part contains "The seven heads of Hydra," meaning seven chapters on diseases of women.

The first head of Hydra is *Sterility*.

Sterilty does not happen to women alone, as is generally supposed. We observe it in males also, where it is called impotence, although there are sterile men who are not impotent. Sometimes the fault is neither in the man nor the woman, but in a dis-harmony between the two, the cause of which is unknown.

The function of the ovaries is of course unknown to the author. Generation was to him the result of the mixing of the male and female semen.

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* *Annales de Gynécologie*, (1879.) *Deutsche Archiv für Geschichte der Medicine, etc.* (*Zweiten Bandes Drittes Heft.*)

The causes of sterility in women are internal and external.

To the former belong the *atmosphere* for many winds make women sterile.—Hippocrates.

Drinking and eating in excess, more especially drunkenness, produce sterility. The same is true of violent passions, particularly hate and jealousy.

Immoderate bodily exercise belongs here. The author would doubtless have spoken of dancing, but out of respect for the princess, who was very fond of this amusement, he was restrained.

Astrological influences are named, but he merely mentions them as they appeared to him little worthy of belief. The same is true of *magic* and *witchcraft*.

The internal causes are seven in number. General and particular irregularities of pregnancy. Among the first, is that which was later called *temperament*.

Faulty condition of the *female semen* in quality and quantity.

Disturbances of menstruation, which are spoken of more fully in the second head of Hydra.

The *fluor albus* (in third head of hydra.)

Malformation of the uterus. He mentions here occlusion of the vulva by a membrane firmer than the hymen, and a deviation of the collum uteri, which hinders the entrance of the sperma "*tortu et oblique*."

Diseases of the uterus. Tumors, abscesses, callosities, etc, which are described in full in the other heads.

Sterility can be treated exclusively by "*des fumées, vapeurs, racines, fleures, herbes, poissons, animaux*," but he avoids giving these in detail lest they be misused.

The four "*Intemperies générales*" are to warmth, cold, dryness and moisture. These not seldom combine as in the atmosphere, as dry cold, warmth and moisture, dampness and cold, and dry heat. Three of these he combats with the waters of Pougues. The efficacy of these waters depends upon the nitrum which they contain, and he compares them in this respect to the waters of the Nile. The Egyptian women are prolific because they drink large quantities of the waters of the Nile which are rich in saltpeter.

The *second head of Hydra* treats of faulty menstruation, and is really only a physiology of menstruation.

The menstrual blood does not seem to him to serve as nourishment for the fœtus, as Hippocrates thought. He looks upon it as impure blood which Nature discharges.

At the time of puberty the female semen forms under the influence of a motion, which the natural warmth increases; this motion extends into the blood-vessels, through which the impure blood escapes. There is, therefore, a reciprocal relation between menstruation and the formation of female semen. Without this the woman cannot conceive. The female semen is produced during the menopause, when the blood ceases to flow.

The unfruitfulness of advanced life is explained by the loss of the functional action of the semen, through the departure of the "*esprit génératif.*" Through this circumstance the uterus becomes dry, the little mouth-like endings of its veins are obliterated, so that neither the menstrual blood nor that which nourishes the fœtus can find an outlet. The impure menstrual blood retained in the body, mixes with that which serves in the formation of semen and the nourishment of the fœtus, and hence conception is impossible.

If the menstrual flow is excessive, much good blood is lost with the impure, whereby the organism is weakened and the seed loses its "*esprit génératif.*" Thus sterility may be the consequence of menstrual disturbance.

Menstruation is suppressed by causes external and internal.

To the first belong abstemiousness in eating, drinking and in everything of a sensual nature, as we observe among religious people; passionate excitement of the mind—as fear, melancholy, love-sickness, etc.

To the internal causes belong obstructions of the vessels, which result either from failure of conformation or an immoderate collection of fat. This accumulated fat stops up the vessels, or chokes them by pressure. Ruptures and flexions of the uterus have like effect.

Profuse menstruation has various exciting causes. Either the body contains too much blood, and the vessels burst from the increased pressure, or the blood is in bad condition.

The third head of Hydra is fluor albus.

Under the head of fluor albus we are to understand the different fluids of the body. These fluids are the blood, the gall, the melancholy and the phlegm, and whenever any one of these is foul, the fluor albus has a different color. It is white from blood, yellow from the gall, black from melancholy, or livid from phlegm. The black flow is most seldom. The uterus has nothing to do with the flow.

From this fluid "gonorrhœa" can be contracted, which, however, must not be confounded with that which "*est contractée pour avoir monté sur les chevaux de Naples.*" This gonorrhœa is a spermatorrhœa of women, and is very dangerous.

The fourth head of Hydra is love, nymphomania and melancholy.

The fluids are retained in the vessels of the uterus, and this forms winds which pass up to the brain; "Hence these tears."

The fifth head of Hydra is suffocation (erstickung) of the uterus.

Under this head the author includes hysteria and every form of it which is accompanied by convulsions. It is caused by pressure on the diaphragm from the side of the uterus, either on account of congestion of this organ or contamination of the menstrual or seminal fluid.

The sixth head of Hydra is formed by the pale complexion, chlorosis.

Chlorosis is the result of retained menstrual fluid, and alteration of the taste; there is a false desire for things which do not nourish. Thus the blood is spoiled, it loses its normal color, and the tissues of the body bleach.

The seventh head of Hydra is represented by tumors of the uterus.

The physicians of the seventeenth century had a tolerably correct idea of the diseases of the uterus. They recognized engorgement, which they called œdema; they recognized phlegmon, carcinoma and ulcerated cancer, and congestion of the uterus, which they called erysipelas. Granulations and ulcerations of the collum uteri are described so exactly that one would think that Dr. Courrade must have known and used the speculum.

Clinical Reports.

NOTES FROM PRIVATE PRACTICE.

ARTICLE VII.

Gunshot Wound in the Head.—Bullet Imbedded in Brain-Substance.—Death on Eleventh Day.— Post Mortem.

Henry K., aged 32, a robust, well-formed coachman, attempted suicide October 1st, 1879, by shooting himself through the head. He fired at the centre of his forehead, while lying on his back in bed, the aim being rendered more accurate by means of a small mirror which he held in his left hand, while the pistol, which carried a No. 32 ball, was held in his right hand. I saw him a few hours after the injury was received, and found him lying on his back in bed, perfectly conscious, with a bullet wound in the middle of the forehead, one inch above the level of the supra-orbital ridges and one-eighth of an inch to the right of the mesial line.

From the wound there had been copious hemorrhage, as his face, neck and pillows were covered with clotted blood. There was a circle, about one inch around the wound, powder-marked. A probe passed into the wound, downwards and to the right, about three inches, traversing the anterior lobe of the right hemisphere without encountering the bullet. A number of loose pieces of bone were felt by the probe as it was carried through the aperture in the skull.

The pupils were normal in appearance, and responded to light; no deviation in size; tongue readily protruded in any direction; special senses of audition, vision, gustation, olfaction and touch unimpaired; patient perfectly conscious and free from paralysis; pulse 84, moderately full; respirations 18; stated that just after he pulled the trigger he felt a sensation of numbness all over—

this lasted a few minutes, when he felt a deep-seated pain in both ears; blood escaped freely from the nose and mouth, and he vomited considerable blood. Water dressings were applied, and absolute rest and quiet enjoined. Gave potassium bromide, .50 grams every three hours.

8 P. M. Dr. A. Reeves Jackson saw him with me, and probed carefully for the ball, but was unable to detect it. It was decided, in the absence of any serious symptoms, to make no further search, but await developments.

October 2d, 9 A. M. Pulse 76, respiration 20. Rested well during the night, sleeping fifteen or twenty minutes at a time; pain in the ears much less; vomited once or twice; no bleeding from nose or throat; slight bloody discharge from wound.

12 M. Pulse 76. Diet to consist of milk, beef tea, oat-meal porridge, and gruel.

6. P. M. Pulse 72. Passed urine freely, natural in amount.

10 P. M. Pulse 70. Sleeping quietly, not a bad symptom.

October 3d, 9 A.M. Pulse 62; respiration 20; tongue clean; no fever; face and neck hyperæsthetic; slight shooting pains through the head, and soreness at the posterior margin of vertex; sero-sanguineous discharge from wound; picked out a small detached piece of bone.

2:30 P. M. Pulse 60. Slight œdema and ecchymosis of left eye-lid; circular slough three-fourths of an inch in diameter forming around wound. Ordered (℥v) 20 gr. of Rochelle salts to move bowels.

7 P. M. Pulse 60, respiration 22. Dr. Jackson again visited the patient with me, and we deemed it best not to probe the wound, as there were no symptoms to indicate cerebral disturbance.

October 4th, 9 A. M. Pulse 60, respiration normal. Feels bright and cheerful; has a better appetite.

7 P. M. Pulse 64. Slight pain in head, back of left eye and towards the ear, for the past hour; attendant had allowed him to walk across the room, and get up to evacuate the bowels, contrary to directions.

9 P. M. Pain in the head has been steadily increasing in severity, is jumping or shooting in character, and referred to the

temples and back of eyes; patient very restless and uneasy, crying out with pain; intense thirst; skin hot. Pulse 68. Increased dose of bromide to (℈i) 1.20 grams, and added (gtt. i) .05 c. c. tr. aconiti rad. every three hours.

11:30 P. M. Pulse 80. Gave medicine every two hours.

October 5th, 2:30 A. M. Pulse 60, full and regular; feels better; dressed wound and removed fragment of bone; some pulpified brain-matter escaped; no odor to discharges, as dressings have been carefully carbolized.

11 A. M. Was seen by Dr. Jackson; symptoms more favorable; procured rubber ice bag for his head to rest on; advised chloral hydrate to allay pain and procure sleep, (15 grs.) one gram as needed.

4 P. M. Pulse 62.

10 P. M. Pulse 60. Slept forty-five minutes after taking the chloral hydrate.

October 6th, 9 A. M. Pulse 64. Slept about five hours during the night; wound looks well.

2:30 P. M. Pulse 64. Both eyelids ecchymotic.

9 P. M. Pulse 84. Is drowsy and stupid; does not answer promptly when spoken to; pupils slightly contracted—respond to light; tongue heavily furred; eyelids agglutinated by mucus; has a feeling of soreness all over the head; no acute pain. As four grams (℥i) of chloral had been taken during the afternoon, the drug was now discontinued.

October 7th, 9 A. M. Pulse 86. Had a comfortable night; removed two small detached pieces of bone from the wound.

2 P. M. Pulse 88, full and strong.

7 P. M. Pulse 86. Gave (gtt. i) .05 c. c. tr. aconiti rad. every hour.

October 8th, 8 A. M. Pulse 76. Was rather restless during the night; is perfectly conscious and hungry, taking milk, beef tea and oat-meal gruel freely.

2 P. M. Pulse 74. Resting quietly.

11:30 P. M. Pulse 72. Resting quietly; talks intelligently when addressed; expresses himself as feeling better; urinates regularly and easily, calling for a vessel when needed.

October 9th, 8:30 A. M. Pulse 74. Is bright and cheerful; feels well.

12 M. Had slight difficulty in swallowing; cervical muscles rigid; cannot turn his head from side to side.

9 P. M. Pulse 74. Muscles of deglutition.paralyzed; lies on left side, face drawn to the left.

October 10th, 7 A. M. Pulse 130, respiration 54. Left hemiplegia; case hopeless.

9 A. M. Passed urine involuntarily.

3 P. M. Pulse 140. Thready, muscular twitching.

6 P. M. Pulse 136, respiration 50. Had an epileptiform convulsion.

8 P. M. Has had three more convulsions; right eye turned in; left not affected; left bronchial tubes filled with mucus; used catheter, removing 700 c. c. (22 oz.) of ammoniacal urine.

October 11th, 7 A. M. Patient died, having had several convulsions during the night. Autopsy two hours later, in the presence of Drs. A. R. Jackson, J. C. Moore and nurses Russ and Brady.

Post-mortem Appearance.—The autopsy was made on Saturday morning, October 11, 1879, at 8:50 o'clock.

Body slightly emaciated; no rigor mortis.

An external pistol-ball wound in forehead about an inch and a half above the root of the nose, and slightly to the right of the median line.

The scalp was then incised from ear to ear across the vertex, and the flap drawn forward over the face. Upon the inner side of the scalp an ecchymosis of four inches in diameter existed around the wound.

The opening in the skull caused by the ball was of slightly crescentic shape, about three-quarters of an inch wide, by half an inch from above downward. No fracture lines were apparent upon the outer table extending from the opening. A small chip of lead was found attached to the roughened bone at the site of the wound. Upon removing the skull-cap, the right frontal sinus was found involved. Its walls were somewhat shattered by the passage of the ball, and the sinus itself contained a little bloody matter upon its membrane, and some small pieces of shat-

tered bone. The blood which had issued from the patient's nose and mouth in the early history of the case had doubtless found its way through this sinus to the nasal cavity and pharynx.

The vitreous table, from its anatomical construction and its situation, suffered most. The brittleness of the bone-tissue, and the nearly spent force of the ball, contributed in causing the internal opening to be larger than the external. Most of the pieces of bone which had been removed through the wound belonged to this table, and now were found two plates of the vitreous layer, each about a half-inch in diameter, adherent by lymph to the dura mater.

The dura mater presented no specially abnormal appearance, save the adherent scales of bone alluded to, and the opening caused by the ball, around which there was a limited inflammatory condition, and softened and disorganized brain substance was issuing from the orifice. Upon removing the dura mater of the right cerebrum, a small quantity of bloody serum, mixed with pus, was found beneath, and patches of pus were found over the pia mater, chiefly along the course of the vessels—the vessels themselves being slightly congested.

The left cerebrum was not affected.

In making sections of the brain substance, the same congested condition of the vessels was apparent. The right ventricle contained a considerable quantity of healthy fluid.

The ball, circular and flattened, was found lodged within the anterior lobe of the right cerebrum, about three-quarters of an inch deep on a horizontal line, and slightly to the right of the longitudinal fissure.

Evidently the cause of death was traumatic inflammation of the brain.

This case is reported not that it presents any strikingly new features of diagnosis or treatment, but as a contribution to the pathology of brain lesions. This case clearly shows that a comparatively large foreign body may be imbedded in the brain substance for ten days without giving rise to any symptoms of particular gravity, such as impairment of the special senses or paralysis. It also favors Ferrier's view of cerebral localization, as here we had extensive destruction of the middle convolutions

of the right frontal lobe, not followed by paralysis of motion or sensation, the functions of these convolutions being concerned in the manifestation of intellectual acts. Later, as a result of inflammation and consequent extension of the lesion to the basis of these convolutions, to the area presiding over motion, we had muscular rigidity of the opposite half of body, followed by motor paralysis; also oculo-motor paralysis, with turning of the head to the opposite side.

D. A. K. STEELE, M.D.

CHICAGO.

ARTICLE VIII.

Traumatic Tetanus.—Recovery.

The case which I herewith report, is, I think, a typical case of tetanus traumaticus. If a subdivision were to be made, it might be classed under opisthotonos. The symptoms and history which will at once be given, will show that we had general tetanus, with opisthotonos, at times a special and marked symptom of the disease.

William J., male, aged 23, single, of previous good health. On the 27th of September last, had the ball of the thumb of the left hand wounded by a circular saw in motion. The wound upon its surface did not exceed one-half inch in diameter, but was irregular and torn, penetrating to the phalanx, the bone not being injured. The wound was immediately dressed by a surgeon whose name was unknown to the patient. On the evening of the same day the young man called on me complaining of severe pain in the thumb. I removed the dressing and a compound resembling pitch or tar which had been used. After cleansing the wound adhesive straps were applied and the man returned to his work, suffered little inconvenience, and in two or three days the wound was re-dressed in the same manner.

On the 3d day of October, six days after the injury, the patient returned to my office, and in a muffled voice said, "there is something the matter of my jaws, I cannot open them." His face was somewhat swollen, the swelling extending to the neck under the angle of the jaw. I scarcely suspected trismus but

was at first disposed to attribute the trouble to parotitis. On the following day, October 4th, I was sent for and found the patient at his home with positive symptoms of tetanus. He was lying stretched out on his back with the muscles of the trunk and extremities rigid. During the night the tetanic spasms had commenced, and at this time they recurred at intervals of about thirty minutes. Nearly the whole muscular system was involved when the paroxysms were the most severe.

The jaws in the first stage of the disease became fixed, with an opening between the incisors of one-eighth of an inch, which was fortunate. The muscles having the greatest rigidity from first to last were the masticatory, those of the larynx, the sterno-cleido mastoid, and other muscles of the neck, those of the chest and the flexors of the upper and lower extremities. The muscles having the most severe tension in the spasmodic contractions were the sterno-cleido mastoid, those of the anterior thoracic region, and of the back, and particularly the flexors of the lower extremities. The spasms of the serrati and other respiratory muscles were clonic, and respiration not seriously disturbed. The flexion of the spinal column was always well marked, when the contractions took place as in opisthotonos. The muscles of the face were not greatly distorted, and the act of swallowing never desperate though always difficult. Photophobia existed throughout; bright light would increase the frequency and severity of the spasms. Sudden and startling sounds would cause the same disturbance. From the second to the seventh day the paroxysms were very frequent, at times without complete intermission. At the end of this time they gradually became less frequent. The pulse never exceeded 110 per minute and generally not above 100. The external appearance of the body was normal in color except the face which was quite red. There was little or no increase of temperature. Bowels constipated and urine scanty.

At the end of the first week the mind was wandering and the the conceptions confused, but entire unconsciousness never. For ten days the patient passed sleepless nights and days, almost no sleep, not exceeding half an hour at any one time. In about twenty-eight days from the commencement of the tetanus the

spasms entirely disappeared; the trismus also, leaving the muscles stiffened, and their action more or less imperfect.

The treatment was as follows: October 4th, which was the following day after the appearance of tetanus, we prescribed extract calabar bean in (half grain) 0.33 doses, every two hours; given in a solution of alcohol and water. At intervals between these doses we gave (fifteen grains) 1.00 each of chloral hydrate and potassa brom., in glycerine and water, every two hours. These medicines were given for twenty-four hours, and the pupils closely watched, but no perceptible contraction took place. The spasmodic contractions were somewhat lessened, still they were violent. A blister (emp. canthar), was applied to the back of the neck, and counter irritation along the spine.

October 5th, administered by the stomach as before, extract calabar bean (half grain) 0.33 doses every three hours, and sulph. morphia, grain (one-fourth) 0.16; potassa brom., (grains xx) 1.33; and chlo. hydrate, (grains xv) 1.00, every one, two and three hours, as the violence of the disease demanded, and we were able to control the violence of the spasms to a great degree, lessening their force and frequency. The pupils were now contracted. The opium alone would have caused this. At times the opiate was given in doses so large and frequent as to cause contraction of the pupils to a very minute size.

October 6th and 7th, the calabar bean in less frequent doses was continued, and the sulph. morphia and potassa brom., dropping the chloral. During this period, when the swallowing was difficult, or when it was desirable to produce still greater effects with the opiate, gave frequent hypodermic injections of sulphate of morphia; from (one-fourth to one-half grain) .16 to .33 at each injection.

October 8th, Dr. Norman Bridge and Dr. Hanson visited my patient. Dr. Bridge suggested that we try calabar bean without opium, and closely observe the pupils. This was tried for about twenty-four hours. The contraction of the pupils was less than when opium was administered, and that which we did have may have been caused by previous doses of this narcotic. I need not go further in detailing the management of this case. The treatment was substantially the same to the end of the spasmodic contraction. It was pushed vigorously when the case was desperate,

and lessened when the acute stage had passed. Flaxseed poultices were constantly applied to the wound, and it was frequently bathed in warm water. The bowels were moved by enema and potassæ acetas given as a diuretic. A liniment containing one part of croton oil to seven parts of castor oil, was applied externally in the after-treatment to remove stiffness of the limbs, and was applied along the spinal column. The diet was beef tea and cream, and these were taken in large quantities through a straw.

The secret in the management of tetanus, if there be any, is to control the spasms and support the patient. The former requires close attention, and opium, I think, is the agent. Calabar bean may have a curative power by its action on the great nervous centers, but thus far its value is not definitely determined; and while it should be tried in cases where we wish to control these most serious disturbances of the nervous system, still in tetanus, I think our chief dependence is in the opium and bromide of potassa and the liberal support of the patient, with a nutritious diet.

HENRY VAN BUREN, M.D.

CHICAGO.

ARTICLE IX.

The Treatment of Diphtheria.

I beg to call the attention of my medical brethren to a mode of treatment of diphtheria which has given me, so far, even in very serious cases, extraordinarily good results, and which is very simple in its application.

My main remedy in the treatment of this disease has been for some time past the inhalation of carbolic acid, diluted, through a sponge. The sponge is saturated with a solution of carb. acid (the strength ranging from 1 part in 200 to 1 part in 100 of water), then placed in a wire holder, formed so as to fit over mouth and nose. This inhaling apparatus is fastened to the patient's mouth and nostrils so that respiration has to take place through the carbolated sponge. I order these inhalations to be repeated every two hours, and each inhalation to extend through about half an hour.

Within twenty-four hours after the beginning of these inhala-

tions the membranes become loose, and are gradually either swallowed or expectorated, and they do not re-appear with the same severity. But if similar formations do take place, they appear thinner and lose that characteristic coloring, growing gradually lighter and more transparent, until they disappear altogether, which is generally within three days, and with this the mucous membrane assumes its normal condition.

As the pain in the throat is ameliorated with every inhalation, the little patients notice this so markedly that every time they experience any pain, they request the application of the carbol. sponge.

In the cases of larger children, more gargling is possible. I order the throat to be gargled with warm chamomile (German) tea, in order to assist in the expectoration of the loose membranes, which procedure, of course, is inadmissible with smaller children.

After every application the sponge ought to be well washed in hot water, and if there be several patients in the same family, each one ought to have its own apparatus, or at least its own sponge. To prevent the carbol. acid sol. from affecting the lips, it is well to oil the lips previous to applying the inhaling apparatus.

The above method of inhalation is very simple and easily applied to children of any age. A few kind words generally suffice to induce them to take to the operation of inhaling with good nature.

Besides the inhalation I use quinine, and in order to keep the bowels open, the fl. ext. of rhamnus frangul. With larger children, I occasionally order gargling with a weak sol. of carb. acid.

As remarked above, this mode of treatment has always given me very satisfactory results. I believe, however, in order to fully establish the merits of this mode of treatment, a larger number of observations is necessary than can be made by a single practitioner. I therefore decided to publish my experience, so as to induce other physicians to test my method.

I wish yet to mention that the apparatus for inhaling, complete with sponge, is kept in stock by Mr. Arend, 179 East Madison street.

DR. RUDOLPH SEIFFERT.

Domestic Correspondence.

ARTICLE X.

BOSTON LETTER.

Messrs Editors:—In my last letter I made the remark that the question of the admission of women to the Massachusetts Medical Society, was not yet settled. I likewise ventured the opinion that if the matter were voted upon in a general meeting, the result would be the contrary of that reached in the October session of the councillors of the society. That a definite settlement is still in the future is proven by the fact that the question has already been raised as to whether the councillors have the power to bring upon the society such a radical change in its conditions without consulting the society at large. The censors are State officers, but are appointed by the councillors, and consequently may receive instruction from the latter. Nevertheless, although I have not been able to find it, I am told that there now exists in the by-laws of the society, a law passed in 1870, to the effect, that no law now exists which permits an interference with the duties and decisions of the censors. This being the case, some of the censors of Suffolk county are of opinion that the recent decision of the councillors relative to women, is an alteration, or at least a new reading of the by-laws. If it be an alteration, the councillors overstep their powers, because a change in the by-laws is illegal without vote of the whole society. If it be a new reading, then the by-law of 1870, to which I have alluded, renders the decision of the councillors to admit women, non-effective so far as the censors are concerned. For this reason the censors of this county doubt the legality of the recent action of the council and, consequently, have drawn up a protest to that

effect. This protest has been communicated to the council and will be acted upon at their February meeting. While they thus remain in doubt as to their duty, the censors naturally are anxious for a proper solution of the question; for, believing they have no right to examine women, they cannot consistently do so. On the contrary, if they wrongly refuse to examine a qualified applicant, every man of them is liable to a fine of $400 for every such case.

Beside the law passed in 1870, and to which reference has been made, the censors of Suffolk county feel that the original by-law of the society in regard to the qualification of candidates has been misinterpreted. This by-law reads: "Every candidate for admission into the Massachusetts Medical Society must, by proper credentials and examination, satisfy the censors of said society that HE possesses the following qualifications for fellowship," etc. Now, the proper reading of this law depends upon the meaning given to the pronoun "*he*." This matter was made a subject of debate some years ago, at which time the opinion of Judge Hoar, in regard to the meaning of the pronoun was asked by the councillors. The Judge expressed the opinion that in its fullest sense "*he*" might mean *he* or *she* according to the judgment of the censors. This view clearly gives large margin, for, any body of censors may say: "If the spirit of the law means he or she, the letter means *he* and he only. So that in the minds of many members of the society the by-law is still considered debatable, and it will undoubtedly give rise to further discussion. If the censors of this county succeed in making a successful stand against the examination of women, these applicants would simply have to go to a county in which censors hold the opposite opinion and after a residence of a few months might apply for examination without hindrance. As you may see, the matter is in a muddle. At the coming meeting of the council the October vote may be reconsidered, and if change in the by-laws prove necessary, the whole question will be discussed in general meeting. We may then find that the majority will oppose the admission of women. That such will be the case is common opinion.

The authorities of Harvard University are making an effort to purchase the ground now occupied by the massive Cochituate

reservoir, now unused, directly behind the State House, in order to erect thereupon a new building for the Harvard Medical school. This has given rise to criticism which culminated in a paper recently read before the Suffolk Historical Society, by a gentleman whose happiest mood in public, seems to be one of criticism, and who, I am sorry to say, does not love the Harvard Medical school as fondly as he should. In his paper, this gentleman calmly expressed the opinion that to expend $250,000 upon a new medical school building when the present one is good enough, would be simply nonsense; that the funds would be far better used in creating a new medical faculty, the present body of teachers being either effete reminiscences of other days, or the mere accidental appointees of a system of disgraceful wire-pulling. I need not say that less powder would have created an equally loud detonation. This paper was the expression of more minds than that of the writer, but, the reputation of the school is a reasonably good one, and as for wire-pulling, the less said touching a mere assertion the better. The teachers of the school are chosen for their ability. Those who know the truth and are able to be just, quietly smile and wonder whether it be possible that the critics find Harvard grapes too sour to be palatable. To offer one of them a professor's chair or a lectureship in the school which is the innocent object of their unmerited criticisms, would be an experiment whose result would pretty surely add new brightness to the jewel consistency and make doubly apparent the rarity of its virtues.

A most necessary and beneficial plan has just been brought into successful operation in Boston. I refer to a directory for nurses which has been opened at our Medical Library, and is under the immediate charge of the resident librarian, Dr. Brigham. The plan originated with Drs. F. C. Shattuck and C. P. Putnam, who, with three ladies of exerience, form the board of management. The system is simply this: At the library rooms is kept a record of the names, addresses, as well as present and future engagements of nurses who have graduated from training schools or who are recommended by physicians in good standing. Applications for nurses may be made at any hour of day or night, and the addresses of such nurses only as are known to be waiting

for an engagement is given to the applicant. He has then only to proceed to her place of abode and secure her. Postal cards bearing the address of the library are furnished at cost to nurses, who are expected to keep the directory informed of their engagements. Failing to do this a nurse loses her place on the list and must register anew.

Each nurse upon registration pays a fee of fifty cents and responds to the following questions, the answers to which are written against her name: "How long have you been nursing? From what school having a diploma, if any? Is there any branch of nursing which you prefer to others? Do you wish to devote yourself exclusively to it? Are you willing to take meals in the kitchen if desired by employers? How much do you charge per day? Per week? To what physicians can you refer?" The replies to these queries give a résumé, as it were, of the nurse in question.

By circular, physicians are requested to recommend nurses to the directory, and likewise to refer to it all persons desiring nurses whether male or female, as well as manipulators and those who administer massage. Those who apply for nurses pay a fee of one dollar during the day, and two dollars from 8 p. m. to 8 a. m.

To the physicians whose names are given by nurses as references, the committee address circulars asking their opinions as to the desirability, capability and other qualifications of the nurses in question. Criticisms of any nature are likewise requested.

I have given you this much detail in order that you may see how perfect the system is. You will easily appreciate the relief which this directory brings to physicians, few of whom in the past have escaped the trial of being forced to drive about for hours, in order to find a nurse of *any* quality, much more a good one. Now, a dispatch or message is sent, day or night, to the directory, a good nurse is at once recommended, and the system goes like a clock. The nurse whose address is given is *always* found ready and waiting at any hour. This is a very excellent feature of the plan, which as a whole, acts with equal benefit in favor of physicians, laity and nurses. The comfort to be derived from an opportunity to read the history and gain a knowledge of

the characteristics and antecedents of a nurse who is to work for a physician or serve a family, cannot be overestimated.

Moreover, the trustees of our city hospital have established a training school for nurses, and the school is conducted in such a careful, systematic and intelligent manner, that Boston will surely have an abundance of good nurses as well as a centralized means of obtaining them.

You have noticed the new form and dress of our *Medical and Surgical Journal.* Congratulations and compliments from all hands assure editors and publishers that the change is appreciated. The journal has developed rapidly within the past three years, owing to the liberality of the publishers and the active ability of Dr. G. C. Warren. The recent fire which destroyed the business house of the publishers, Messrs. Houghton, Osgood & Co., did not cause the suspension of the *Journal* even for one week.

We have our share of sickness. The summery-winterish weather has worked much harm in debilitating the health of the sensitive.

Boston, Jan. 13, 1880.

Article XI.

Wickersheimer's Method of Preserving Anatomical Preparations and Whole Bodies.

Chicago, Jan. 20, 1880.

Editors of the Chicago Medical Journal and Examiner:

About a year ago I read in a German newspaper that Dr. Wickersheimer, prosector in the anatomical institute at the University of Berlin, had invented a new preserving fluid, by which it was possible to preserve any organic bodies (plants, animals and human bodies) so perfectly that they retained their original natural form, color and limpid texture. The inventor, at first, secured a patent for his invention, but in the interest of science he relinquished it; and everybody may employ Wickersheimer's method, which is thus described in the *Deutsche Reichsanzeiger:*

"The preserving fluid is prepared as follows: 100 grams of alum, 25 grams of cooking salt, 12 grams of saltpetre, 60 grams of potash and 10 grams of arsenious acid are dissolved in 3000 grams of boiling water. The solution is cooled and filtered. To every 10 liters of this neutral, colorless and oderless fluid there are added 4 liters of glycerine and one liter of methyl alcohol. For the dry preservation the preparations are immersed in the fluid from six to twelve days, according to their size, and then dried in the air. Organs, like the lungs and intestines, are filled with the fluid before immersion, and blown up before drying. Small animals and portions of bodies, which are to be preserved in their natural colors, are simply kept immersed in the fluid. For embalming, the body is injected and laid in the fluid for several days; it is then taken out, rubbed off and dried, and wrapped in linen or oil-cloth saturated with the fluid, and encased in air-tight receptacles. If bodies are to be temporarily embalmed for scientific purposes the injection of 1½ liters (for children) to 5 liters (for adults) is sufficient. Even after years, the cut surface of the muscles shows the appearance of those of a fresh corpse. Bodies treated in this way have not the least odor."

As this invention seems to be of the utmost importance for anatomy and consequently will be of great interest to the medical profession, you may perhaps deem this brief note worthy of publication. Respectfully, F. C. HOTZ, M.D.

ARTICLE XII.

PUMPKIN SEED FOR TAPE-WORM.

Messrs. Editors:—Seeing in my January number of your JOURNAL AND EXAMINER, an article entitled "My Struggle with a Tape-worm," I want, through your columns, to offer Dr. Pratt my sympathy and indorse his final method. I have been in the same boat, only *a little more so*. In June last, a lady called on me with a link of tænia solium, which she said her little boy (eight years old) had passed. She said he had been passing them for over a month before she had found it out.

Now what was strange to me in this case, was the fact, that links of the worm would come away while the child was at his play or at school. In fact I was at the house once, a few days after the first treatment I gave, when the boy picked a link from the back of his neck, saying "there's another of those worms."

This, it seems, was an unfrequent occurrence. The links would sometimes appear at the neck, again he would feel them on his belly and pick them off, and scarcely a night passed that he did not find joints in his drawers or stockings.

I (like Dr. Pratt) used fld. ext. male fern as largely as I dared (after fasting), and gave castor oil as is customary. No especial results. Then used capsules of oil of male fern with kamala. Again no result. Then consulted a neighboring physician, and gave oil of male fern itself. I obtained it in Chicago of a druggist, who assured me it was of prime quality. For the purgative I gave a mixture as follows:

℞ Ol. terebinth.....	(gtt. xx)	1	10
Ol. tiglii.....	(gtt. ij)		
Ol. ricini	(f℥ss)	16	
Muc. acacia	(f℥ss)	16	

Mix.

Now, I was sure of the offender. The result was half a dozen copious stools with some griping and tenesmus toward the last, but *no worm.* Not even as many links as would pass in ordinary stools. About this time the mother was advised by an "old lady" to give pumpkin seeds. She asked me about using them, but I discouraged the idea, saying in a few days I would give another preparation which I was sure would bring the worm. But in the interval they tried the pumpkin seeds, and the boy came running into my office one day, breathless and excited, saying, "Oh, doctor, we've got the worm," "Come and see it!"

I found he had passed a *complete* worm about twenty feet long. Imagine my chagrin when "Young America," in an exulting way said, "Oh, doctor, grandma's pumpkin seed beat all your medicines." I had to confess it did. But soon the boy again began to pass joints of another worm, which were broader than any passed before. I advised a repetition of the pumpkin seed, and

the result was a worm about forty feet long. Since then (last September), the boy has been in the best of health. I kept him for two months on sulph. of iron (j gr.) .05 doses morning and night), and tr. colomb. and gentian co. before meals.

H. J. THOMAS, M.D.

GREENWOOD, WIS., Jan. 16, 1880.

ARTICLE XIII.

A CONTRIBUTION TO THE PHYSIOLOGY OF THE PLASTIC ART.

Messrs. Editors:—It is plainly the duty of each, the busy practitioner and the still busier student, not to wait for time and opportunity to work out long and difficult scientific problems, but, being constantly in the presence of important facts, to contribute anything, however apparently trivial, coming within the scope of observation and experience, to the general store of medical knowledge. The following is not unimportant in a purely medical point of view and it is certainly a medical novelty of considerable physiological significance.

My office is directly opposite the unpretentious and busy studio of the eminent sculptor, Mr. Leonard W. Volk. In the intervals of practice it has been my privilege, and I have improved the occasions, to watch the process of modelling in clay, a process which is familiar to every school-boy in Rome, but rarely witnessed by the citizen of Chicago, and scarcely less rarely in other parts of America. The sculptor has for more than a year, been engaged upon five colossal statues; the first being that of ex-Senator Douglas and the other four being symbolical figures representing "Illinois," "History," "Justice," and "Eloquence," which are to surround the base of the monument. What struck me forcibly and led me to write this brief communication, was the number and variety of necessary manipulations, the patting, coaxing, spreading, the rubbing out and filling up and sticking on of the plastic clay, before the beautiful statue was ready to be immortalized in bronze. These manipulations and movements were so frequent and numerous that I was curious to follow and even to count them. I did this with the

following striking results: Mr. Volk is actively at work in his studio every day from six to twelve hours. He naturally works more hours during the long days of summer. He works incessantly at least eight hours every day. This is a fair average. It took him one hundred and twenty days to create the statue of Douglas and he occupied ninety days each in creating the other four. Multiplying the number of days by eight, the number of hours he works each day, and we get four thousand, eight hundred and forty hours, which, reduced to minutes, yields two hundred and thirty thousand and four hundred. The number of strokes was constantly from one hundred and twenty to one hundred and sixty a minute. We will use the minimum figure to allow for rest and interruptions. Multiplying by this we get the following, viz., *twenty-seven million, six hundred and forty-eight thousand strokes!* Now, most of these manipulations are performed by the index-finger and thumb of the right hand, and when modelling-sticks are used there is still no rest for these two members. Mr. Volk fortunately has become ambi-dextrous since he received an injury to the right thumb and thus he can throw a part of the labor on the thumb and finger of the left hand. One would naturally suppose that the muscles so incessantly engaged in these delicate manipulations would become the subject of neuroses like the kinesiopareses, paralyses and cramps of writers, pianists, and violinists, but notwithstanding the artist, unlike them, works in cold and wet material, he assures me that he has never suffered from any inconvenience beyond a myalgia of the muscles which are exercised, fatigued and chilled, and a soreness due to the wearing down close of the finger nails, especially when the clay is gritty. One would naturally expect more marked results from *thirty millions of movements in the course of a single year mainly by one finger and one thumb!* In the calculation I have made above I have not taken into account at all the work required to reproduce the clay model in plaster, a part of the art of sculpture which only American sculptors have to do themselves. It is a purely mechanical operation, of course, but it is very laborious, and is always done by common skilled artizans in Italy.

DR. JAMES I. TUCKER.

CHICAGO.

Reviews and Book Notices.

ARTICLE XIV.—CLINICAL MEDICINE; A SYSTEMATIC TREATISE ON THE DIAGNOSIS AND TREATMENT OF DISEASES. Designed for the use of students and practitioners of medicine. By Austin Flint, M.D., Prof. of the Principles and Practice of Medicine, and of Clinical Medicine in the Bellevue Hospital Medical College, etc. Philadelphia: Henry C. Lea. 1879.

This is a new work from one of the best known and most eminent writers on practical medicine in this country. It is a full-sized octavo volume of nearly 800 pages, published in the usual good style of the well-known medical book publishing house of Henry C. Lea. As stated by the author in the preface, the work is devoted almost exclusively to the diagnosis and treatment of diseases, including very little concerning their etiology, special pathology, or morbid anatomy. It seems to have been the purpose of the author to place in the hands of the student and practitioner a work that would aid him in the simple matter of diagnosis and treatment, which he impliedly regards as embracing the special field of clinical medicine. Notwithstanding our high estimate of the author and the value of his many contributions to medical literature, we fail to see the propriety of thus restricting *clinical medicine* to the two topics just named. True, it is the first duty of the practitioner at the bedside of his patient to make a diagnosis, *i. e.*, to determine the name of the disease, its location, extent, and stage of advancement, but does this alone qualify him to prescribe the proper remedies? Is it not just as necessary that he study and see clearly the nature of the morbid action set up and its tendencies; in other words, the special pathology of the case? And how can he apprehend this fully, without revert-

ing to the causes and circumstances under which the disease has been developed. The relations between diagnosis, special pathology, and the indications for treatment, are so intimate that they cannot be separated and maintain a claim to rational practice. The clinical teacher who should occupy the attention of his pupils altogether with the methods of diagnosis and the various remedial agents found valuable in the management of diseases, might make them skillful diagnosticians, but very deficient practitioners. Our author fully acknowledges this, when he says in the preface to the present volume: "The work is intended to accompany, and not, in any measure, to supercede, more comprehensive treatises embracing the morbid anatomy, the causation and the pathology of diseases. It is needless to say that no one who neglects these fields of study can become an intelligent or competent physician; etc." And yet hundreds of students and practitioners will take this new work, restricted as it is to diagnosis and treatment, both as a text-book and a book of reference, and *not* supplement it with more comprehensive works until their modes of thought have become narrowed and partial, and their practice routine and empirical.

We have already too many aids and helps, hand-books and abridgements, summaries and essentials, all tending to encourage superficiality in study, imperfect mental discipline, and still more imperfect professional attainments. We regret that so eminent an author and teacher as Prof. Flint, should have lent any encouragement to this tendency of the times, by giving us a volume in which the important topics of diagnosis and treatment, are so far separated from their intimate and natural relations to pathology and etiology. Having expressed thus freely our disapproval of the general scope of the work so far as it relates to the separation of diagnosis and treatment from the other equally important items of study at the bedside, we turn with pleasure to a brief examination of the contents of the work.

It opens with an introductory chapter of over forty pages containing brief, but excellent instructions concerning the modes of examining patients; the keeping of clinical records and reports; methods of diagnosis and the relations of symptomatology thereto; the objects of treatment both hygienic and medical; the sources

of error in therapeutics; and the professional conduct of physicians. Passing this introductory chapter, the author enters directly upon the consideration of the diagnosis and treatment of individual diseases. He follows the general custom of dividing all diseases into two classes, general and local.

He treats of the latter class first, and groups them in accordance with the physiological systems of organs, "namely, the respiratory, circulatory, digestive, urinary, and nervous." A section is devoted to each of these six groups, prefaced by some preliminary observations concerning the means used as aids in observing and properly appreciating the diagnostic symptoms presented at the bedside. These six chapters occupy over six hundred pages, or six-sevenths of the whole volume, leaving only about one hundred pages for the consideration of general diseases. In this latter class, however, the author includes only the idiopathic fevers with diphtheria, erysipelas, gout, rheumatism and epidemic cholera; while chlorosis, pernicious anæmia, Addison's disease, Hodgkin's disease, leucocythemia, general dropsy, pyæmia, septicæmia, scorbutus and scrofula, are classed with the local diseases in the chapter on diseases of the circulatory system. The propriety of such a grouping appears to us very questionable, though of little practical importance. Throughout the volume, in whatever relates to diagnosis and the means and methods to be employed, the author's directions are clear, full and eminently judicious.

We cannot make the same unqualified remark in regard to that part of the work devoted to the treatment of diseases. While the enumeration of remedies is sufficiently full in the great majority of cases, the careful reader, and especially the inexperienced practitioner, anxious for exact knowledge, will notice in reference to many diseases a failure to designate the adjustment of the remedies to the several stages in the progress of diseases under treatment. Take the following as an example, from pages 773–4, in reference to the treatment of acute gout.

"The objects of treatment are to relieve the patient as speedily as possible, and shorten the duration of the attack. Much can be done therapeutically to effect these objects.

"The severe pain should be relieved by some one of the preparations of opium. The promptness of action when administered

hypodermically renders the method preferable if, as is usual, the pain be extremely intense.

"If administered by the mouth, the *Dover's* and *Tully's* powders are eligible preparations, in consequence of their diaphoretic effect.

"If the stomach be irritable, laudanum may be given per enema. The doses are to be graduated by the pain, and should be sufficient to afford relief without, of course, incuring any risk of narcosis. A watery extract or infusion of opium may be applied to the effected joint. For shortening the duration of the attack, colchicum is emphatically the remedy. It has no succedaneum in this disease. It should be given as soon as practicable after the paroxysm, that is, at the beginning of the remission or intermission. Half a drachm of the tincture or wine of the colchicum seeds may be given at a dose, and repeated after intervals of three hours, until a moderate cathartic effect is produced. The efficacy of the remedy is not derived from its cathartic effect, but the latter is evidence that it has been given to a sufficient extent."

Here we are told, substantially, to use some one of the preparations of opium to relieve the intense pain of the paroxyism, that we must use it in sufficient doses to accomplish the result, and must be careful not to *narcotize* the patient.

But not one word is said as to what doses of any one of the opiate preparations, an adult patient in the midst of a paroxysm of acute gout, generally requires, or how often it may be safely repeated. And yet that is the very item of information which the student and inexperienced practitioner needs, when he comes to the bedside of his suffering patient. Again, if colchicum is emphatically the remedy for cutting short the attack, why delay its use until the paroxysm subsides? Why not give it in efficient doses conjointly with the opiates; more especially as its efficacy does not depend on its cathartic action?

In our own experience, we have found nothing that would more speedily allay the intense pain of the paroxysm, than an equal mixture of acetated tincture of opium and wine of colchicum seeds, given in doses of from thirty to sixty minims every one or

two hours until relief began to be felt, when the interval between the doses is increased.

Again, on page 770,* the author writing of the treatment of chronic rheumatism, or the rheumatic diathesis, says:

"While it must be admitted that treatment very often fails, the measures proving in some instances useful, if not successful, are those which have for their object the removal of a diathetic condition. Various medicinal remedies are serviceable, each in a certain number of cases, and, and with proper caution, they should be severally tried before coming to the conclusion that nothing is to be expected from drugs. The following are the more important of these remedies: guaiacum, mercury in the form of bichloride or the iodide, the iodide of potassium or ammonium, colchicum in small doses, the hydrochlorate of ammonia, arsenic and sulphur."

Here are eight or nine efficient drugs named, differing widely from each other in composition, and mode of action upon the human system, and it is intimated that each one of them is capable of benefitting "a certain number of cases" of chronic rheumatism; but no attempt is made to point out the particular kind of cases that each remedy is most likely to benefit. On the contrary, the student is rather plainly encouraged to begin the list with each unfortunate patient, and proceed blindly from drug to drug until the desired relief is obtained or the list has been completed. It is true, the author says this should be done "with proper caution."

But what constitutes proper caution in the use of these remedies in the treatment of chronic rheumatism? Does it consist in stopping when the *gums are touched* by the mercurials; the bowels purged by the colchicum; or the appearance of initial symptoms of general dropsy from the arsenic? These are certainly questions of interest to the practitioner, and such as a full treatise devoted exclusively to diagnosis and treatment should answer. We have quoted the above simply as specimens of what may be found in almost all parts of the volume before us. They certainly very much lessen the value of the work, especially as a text-book for students. The same defects are found more or less, however, in most of the more recent works on practical medicine.

It is not uncommon to find forty or fifty pages devoted to a consideration of the symptoms, causes, pathology, morbid anatomy and diagnosis of a disease, while the treatment is summarily disposed in one or two pages.

This is not as it should be. The real end of all our study is to learn the art of prevention and cure of diseases.

And our success will always depend fully as much upon the accuracy with which we adjust our remedies to the stage of progress, and the special character of the morbid action in each case, as upon the kind of remedies we choose. N. S. D.

ARTICLE XIV.—THE PATHOLOGY AND TREATMENT OF VENEREAL DISEASES. By Freeman J. Bumstead, M.D., LL.D., late Professor of Venereal Diseases at the College of Physicians and Surgeons, New York, etc., etc. Fourth edition, revised, enlarged and in great part rewritten by the author and by Robert W. Taylor, A.M., M.D., Professor of Skin Diseases in the University of Vermont, Attending Surgeon to Charity Hospital, etc., etc. With one hundred and thirty-eight woodcuts. 8vo. pp. 835. Philadelphia: Henry C. Lea. 1879.

The first edition of this familiar work, issued in 1861, commanded a success which was the fruit not only of its intrinsic excellence, but of its timeliness. It was presented to the profession of this country before the time of that remarkable awakening of interest in venereal studies, to which the book itself in large part contributed. At a date when the subject had been largely relegated to the great teachers of surgery in America, who for the most part, it may be said, viewed it from the standpoint of so-called unicism, this treatise, written in a remarkably lucid and pleasant style, attracted universal attention to the doctrines of the two men, who were then the rising and setting suns of French syphilography. The book thus attained a popularity among medical men, the like of which can scarcely be realized a second time, either by itself or its competitors, from the lack of the peculiar timeliness which has been already mentioned. In brief, the work became the oracle, in its special field, for many who read its pages with an interest which was only equalled by their delight. Nor was this true only of professional gentlemen.

Venereal patients in the *clientèle* of the general practitioner, purchased and perused it, with an eagerness born of their necessities, and even quoted its precepts to those in whose charge they had sought relief. Beyond the borders of the United States, such was its popularity, that before the issue of a second edition it received the honor of Italian translation and publication.

The editions which followed, were revised and improved to a certain extent, sufficient at least to sustain the high reputation of the treatise; but the later, it must be confessed, were threatened with eclipse by the appearance of a new and excellent work, which was also from the pen of American authors of experience and well-known ability, and which rapidly commanded the position to which it was entitled. Certainly it was high time for a more thorough and complete revision of this volume, which, more fully than any other, has become identified, on this continent at least, with the literature of venereal diseases. The prestige of a large and deserved success could not much longer withstand the eager competition of a host of American authors and observers of unquestionable merit.

The task has been accomplished, and that right worthily. We find that we have here practically a new book, and that the statement of the title-page as to the fact that it has been largely rewritten, is a sufficiently modest announcement of the important changes in the text. Dr. Taylor, who was selected to aid in the work of revision, is already favorably known to the profession at large as an author of numerous monographs on dermatological and venereal subjects, not the least of which is his valuable essay on "Syphilitic Lesions of the Osseous System in Infants and Young Children," New York, 1875; a work which has gained for the writer an international reputation in this special department of a special branch of medicine. It is not difficult to detect his careful handiwork in the transformation of the treatise.

How great this task has been, will best be determined by him who has made the attempt to examine, even in a cursory fashion, the literature of any other medical subject for a single year. From January to November, 1879, for example, no fewer than 394 papers, pamphlets, books, articles in medical periodicals,

monographs, etc., were printed under the designation of syphilis and gonorrhœa only, and to this large number should be added, for the current year, not only those to appear during the last two months, but an equally large, if not still greater number of titles in the department of skin diseases, general pathology, general surgery, and genito-urinary disorders. All these, appearing in the English, French, German, Italian, Spanish and Russian languages, furnish a truly formidable mass of material, which accumulates between the dates of the several editions of any given work, and much of which should pass under the eye of the writer of a systematic treatise on venereal diseases. For the day has passed, rarely to return, when originality of experience or expression can take the place of this laborious compilation, digestion and condensation of the labor of the best men. It has nearly come to this, that in the day which we see and in the departments of science we cultivate, the less original and the more catholic a book, the greater its chances of success and survival. To return to the volume before us, it is not too much to say that a still larger treatise could have been filled with what is to-day known about either nervous, hereditary or osseous syphilis, stricture, the diseases of the prostate gland due to gonorrhœa, or a dozen other topics which might be named.

We have made this explanation, chiefly because, after a thorough examination of the present edition, we can assert confidently that the enormous labor we have described, has been here most faithfully and conscientiously performed. They who know how to appreciate the difficulty of such a task, will be surprised, when they come to consult these pages for the literature of any important subject, to discover how far an abstract of the same has been incorporated with the text.

A few illustrative examples will suffice to direct attention to this valuable quality of the work accomplished. Hydrocele, for instance, is not a subject which has a direct connection with venereal disorders, and on turning to the latest edition of Mr. Curling's voluminous treatise on the testis,* we find 132 pages devoted to the thirteen varieties and complications of hydrocele there tabulated. But our authors have succeeded admirably in conveying

* London, 1878.

all essential information on this topic, in the closely-printed six pages which are by them allotted to the subject.

A comparison of the book before us with one of the latest published under a similar title in France, will serve to establish the fact of the relative excellence of the American treatise. The comparison is the more justifiable, as our American authors have not hesitated to make frequent references to the labors of M. Louis Jullien,* and even to borrow some of his plates.

On the question of the etiology of hereditary syphilis, which has of late elicited a great deal of discussion, and which has attracted the attention of eminent men, who have espoused every succeeding solution to the problems presented, the differences between the writers in comparison become conspicuous. Jullien, resting implicit faith upon the hitherto impregnable law, formulated by Colles in the year 1844, that a child affected with hereditary syphilis will not infect the breast of the mother who suckles it, hastens to set forth the following propositions as fully established: 1. Without infection of the mother, there can be no hereditary syphilis. 2. The father cannot transmit syphilis to his child without contamination of the mother.

But these propositions have been refuted, time and again, by clinical observations of the most scrupulous exactness, extending, as is requisite, over long periods of time, and conducted under the serveillance of scientific men of established skill and probity. The results are fixed facts, which are not to be either neglected or explained away. But there is a peculiarity in the mental constitution of French medical authors, which is an inextinguishable reverence for Gallican ideas and Gallican heroes. The doctrines which Jullien sustains are the untenable theories which Cullerier first asserted, which have since borne his great name, and which were shown to be false and dangerous even before the publication of the masterly monograph by Kassowitz, which, if it proved nothing else, showed that in the paths of brilliant and original investigation, the sceptre was departing from the French nation.

Upon the points in question, Bumstead and Taylor express opinions which are in accord with the views of the most judicious authors in this department. Syphilis, say they, is transmissible

* Traité Pratique des Maladies Vénériennes, Paris, 1879.

from the father to his offspring. Viewing the law of Colles in the only light which is warranted in the present state of our knowledge, they declare that the immunity of the mother of the infant who has inherited syphilis, is due to some occult and undiscernible change in her system. They refuse to declare that such immunity is equivalent to maternal syphilis, until that syphilis is pronounced and demonstrable. This is really not merely a curious problem for the theories of doctrinaires. It is a practical and every-day question of pressing importance. Every syphilitic patient has the right to know himself or herself to be such, and it is for the interest of each as well as for the interest of society at large that such knowledge should be had. What refinement of cruelty is greater than that which suspends a sword worse than that of Damocles, for the space of years (and there are cases where this period has extended to a quarter of a century), over the head of one who should enjoy the fullest assurance of safety!

Again, with regard to the *choc en retour* of Ricord, and the fanciful "syphilis by conception," more recently advocated by Diday, of Lyons, it seems well-nigh impossible for Jullien to divest his mind of an extraordinary sentiment of reverence for him whom the French are fond of calling the "Lyonnaise master." Jullien declares that Diday's method (of regarding the menstrual derangements of the wife of a syphilitic husband as so many abortions with syphilitic ova) is exceedingly ingenious, and one which supplies the key to a great many problems. He proceeds to express his admiration for the way in which Diday has expounded his theory. At the same time, the opinion is advanced that the theories in question are not such as to command absolute conviction; and a mild request for further proof is made, accompanied by an apology for taking such a liberty.

Now the fact is, that Diday's absurd paper on this subject has already been shown to contain errors and damaging omissions. It has not, so far as we are aware, received the indorsement of a single syphilographer of repute; and its quasi support by Jullien is, to us, an additional evidence of the prevailing French method of writing books in which everything that emanates from the pen of a French writer is regarded with at least respectful consideration, while the views of those who oppose the latter, provided the

authors are not of French nationality, are esteemed as those of "barbarians," in the Greek acceptation of that word.

Bumstead and Taylor have the courage to pronounce Diday's recent article as "valueless and defective," and formulate the conclusion to which they have arrived as follows. It is in accord with what seems to us the most judicious interpretation of established facts: "We conclude that, in hereditary syphilis, the disease is conveyed either by the sperm-cells or by the ovule, diseased at the time of conception, and that infection of the mother or of the child cannot take place through the utero-placental circulation."

Lastly, a further comparison of the two books serves to exhibit the care which has been bestowed upon typographical appearance by the Americans. They furnish a list of twelve errata, printed on the page which faces the opening sentence of the introduction; and the character of these is such as to require, in the main, a change of but one letter or the addition of an *umlaut*. The errors belong, in short, to that list which should be recognized as the "inevitable" in the prosecution of so great a task as the publication of a treatise of this size and scope. The proof-reading has evidently been of the most conscientious character, and has thus contributed in no small degree to the pleasure which the perusal of the work affords.

In Jullien's work, however, can be recognized that sublime indifference to the orthography of all languages other than the French, which observant men have come to regard as a distinctive feature of their scientific publications. We have enumerated no less than thirteen typographical errors in two successive pages of bibliography given in the "Maladies Vénériennes," and it is fair to infer from this that are more than one thousand in the entire 1120 pages. It should be added that these errors are not only those which occur in the rendition of foreign names; we note these also in the spelling of French words, and even in the titles of pages.

We have endeavored thus briefly to suggest some comparison between these two works, lately issued on the same subject, that the results might indicate more clearly than could the mere dictum of a reviewer what reason we have to congratulate our countrymen upon the truly valuable addition which they have made

to American literature. The careful estimate of the value of the volume, which we have made, justifies us in declaring that this is the best treatise on venereal diseases in the English language, and, we might add, if there is a better in any other tongue, we cannot name it; for, while it may be admitted that there are to be found elsewhere, on certain special subjects, fuller discussions of every phase of controverted themes, there are certainly no books in which the student or the general practitioner can find such an excellent résumé of the literature of any topic, and such practical suggestions regarding the treatment of the various complications of every venereal disease.

We note that the metric system has been so far adopted by our authors that in all printed prescriptions the dose is named both in terms of the old and new nomeclature, an arrangement which has been adopted by several German authors since the use of the metric system was in their country made imperative by law. The method of our authors is one which should satisfy the friends and enemies alike of the recommendations of the American Medical Association in the same connection. The prescriptions of our authors are, as a rule, too, metrically accurate, and not mere transpositions of terms. A few errors, in the accomplishment of this task, were only to be expected; and we note one on the 573d page, where a formula is given for the treatment of phtheiriasis pubis. The proportions are accurately given in terms of the metric system, but, by the old reading, the solution of the bichloride of mercury ordered will contain sixteen grains to the fluid ounce. This solution would, without any question, put an end to the lice, but we may be permitted to express the hope that the tyro who first consults the page for the purpose of being instructed as to what he shall employ, will prefer to be guided in his selection by the proportion given in the metric formula.

In the matter of mensuration of urethral instruments, our authors have also, in the present edition, given a deserved preference to the French scale; figured the Handerson gauge, which we esteem far more useful than any others sold (even to the exclusion of the lately-devised "adaptable metric gauge" of Dr. C. H. Thomas, of Philadelphia); and have, in our judgement,

done well in inclosing within quotation marks the name of the so-called "American scale," proposed by Drs. Van Buren and Keyes, in their otherwise admirable treatise. If these last-named gentlemen had been content with baptizing their scale with their own names, an immense deal of confusion would have been avoided. By attaching a national name to their scale of instruments they accomplished a result which we can well believe they did not anticipate. They might have been speedily forgiven for the boldness of their action in this matter, if it had resulted in giving us a truly American uniformity. As it is, we are still compelled to follow our authors in the adoption of that which "is known and used as a standard by so many surgeons in every civilized country."

In the matter, too, of the use of instruments for mensuration of the urethral chink, when it is distended, and for incision of strictures of large calibre, we congratulate our authors upon the judicious fairness with which they have handled the subject. They have not failed to give honor where honor was due, and, refusing, practically, to embody a section of a controversy in their pages, which would only serve to disfigure them, they have earned for themselves a merited commendation.

The style of the book, as re-written, is fully equal to that of the preceding editions, which was in parts a model of elegant English. It must be admitted, however, that a species of incongruity can be detected, in the indiscriminate use of the personal pronoun, which leaves the reader occasionally in doubt as to whether the senior or the junior author is responsible for the text, or whether they have both contributed to its lines. It would surely have been an improvement if the editorial "we" had been adopted throughout, as thus the unity of the book would have been more completely sustained.

It is sufficient to ask of our authors in medicine that they embody in their work, the fruit of the researches of the most trusted of their contemporaries and predecessors. It is too much to ask of them that they also point out to us the lines of probable advance in the wilderness of the knowable and yet unknown or but imperfectly known. We can, therefore, well afford to excuse the writers of the treatise before us, for their halt in the

face of a proposition to which it seems to us the scientific world must speedily give assent. It is the proposition which asserts the contagiousness, in different degrees, of all pus. Or, to place the doctrine in a clearer light, it is a proposition which asserts that the living product of the process of inflammation is possessed of an energy which is capable of originating a like process in all living matter, this capability being proportioned to the activity of the process by which it was itself engendered.

First announced by Von Roosbroeck, we believe, and substantiated by experiments by Pick, of Prague, in so far as it relates to the matter of the acne pustule, it is an explanation of much that is either doubtful or curious in pathology. It may be found to throw some light on the "contagious impetigo," of the late lamented Tilbury Fox, and, if finally well established, will splendidly illuminate many obscure points in the study of venereal diseases. If all pus is more or less contagious, we may be sure that the pus produced by the inflammatory process in venereal disorders, will enjoy its full share of such a power. We shall not then find it to be absolutely true, as stated by our authors (p. 398), that "pus of a sinple inflammatory bubo is like that of any common abscess, destitute of contagious properties, and therefore not inoculable." For it is precisely the pus of a common abscess which we shall one day find to possess the exact qualities which are here denied to it, unless all the sign-posts, which are now plainly pointing in that direction, be speedily removed.

But as we have said, it is altogether too much to require of our standard text-books that they be not only encyclopædias of wisdom, but oracles of prophecy as well.

The several plates in the work are all finely finished, and the reader will be pleased to find here many that are not only entirely new, but of great service in the explanation of the text. The publisher has not failed to execute his part of the labor of introducing this practically new work, in an exceedingly handsome dress. The volume is larger than its predecessors by 131 pages, but from a reduction in the size of the type, it is estimated that it contains about twice as much matter. The index to this edition, we find full and accurate. In the matter of the abbreviations of the titles of periodicals, the plan has been here followed,

which was first employed by Dr. Billings, of the library of the Surgeon-General's office.

We take pleasure in repeating that we believe this to be the best treatise on venereal diseases in the English language, and we congratulate the authors upon their brilliant addition to American medical literature.

The news of the death of Dr. Bumstead, which occurred on the 28th of November, 1879, and which attaches a melancholy interest to this latest work of his pen, reached us only after the completion of the preceding paragraphs. Having written in an effort to impartially consider the fruit of his labor, we have preferred to make no change in any sentence. Needless to say, however, that if we could have known the learned author was to survive for but so brief a time the exhausting labor which the preparation of his book enforced, we should have approached the task of reviewing it with greater diffidence and turned its pages with a gentler hand.

Others, without doubt, will pay the timely and tender tribute to that intellectual manhood, which is hereafter to adorn the roll of the honored dead of the profession of our country, and to those genial qualities of heart which have endeared their owner to his many personal friends. We can not but be grateful that his life was spared to add the finishing touches to this great work, in which all his largest activities were interested, and which will survive as a fitting monument to the brilliant success of his professional career. We would lay this as a flower on the tomb of the dead master, that in a field which others might esteem repulsive, he wrought that which has the fairness and purity of the spirit by which he was moved.

J. N. H., *in the American Journal of the Medical Sciences.*

BOOKS AND PAMPHLETS RECEIVED.

My Struggle with a Tape-worm. By G. B. Pratt, M.D., Elkhart, Ind., late Resident Physician of the King's County Hospital, Brooklyn.

Dental Hints for Country Medical Practitioners. By G. Newkirk, M.D., Wenona, Ill.

Valedictory Address to the Graduating Class of the Medical Department of the University of California. By W. F. McNutt, M.D., L.R.C.P., Ed., etc., etc., Professor of Principles and Practice of Medicine, Med. Dep. University of California.

A Manual of the Practice of Surgery. By W. Fairlie Clarke, M.A. and M.B. (Oxon), F.R.C.S., Assistant Surgeon to the Charing Cross Hospital. From the last London edition. Revised and edited, with additions, by an American Surgeon. New York: William Wood & Co. 1879.

On the Use of Water in the Treatment of Diseases of the Skin. By L. Duncan Bulkley, A.M., M.D., Physician to the Skin Dept., Demilt Dispensary, New York, etc., etc.

A Contribution to the Hæmatinic Properties of Dialyzed Iron. By Robert Amory, M.D., of Longwood, Mass.

Pay Hospitals and Paying Wards throughout the World. Facts in Support of a Re-arrangement of the English System of Medical Relief. By Henry C. Burdett, late General Supt. of the Queen's Hospital, Birmingham. London: J. & A. Churchill, New Burlington St., W. 1879.

Responsibility Restricted by Insane Delusion. By T. L. Wright, M.D., Bellefontaine, O.

A Clinical Inquiry into the Diagnostic Significance of Absent Patellar Tendon Reflex. By C. H. Hughes, M.D., late Superintendent and Physician to the Missouri State Lunatic Asylum, Fulton, etc., etc.

Saint Bartholomew's Hospital Reports. Edited by W. S. Church, M.D., and Alfred Willett, F.R.C.S. Vol. XV. London: Smith, Elder & Co., 15 Waterloo place; 1879.

DR. J. ADAMS ALLEN, President of Rush Medical College, has been compelled, in consequence of the state of his health, to take a respite from the labor incidental to his practice as a physician and his duties as a college professor. He sailed for Europe January 17th, in the company of his wife, and intends to visit Egypt first, passing up as far as the Nile cataracts. He expects to return in the fall of this year, and has carried with him the best wishes of his many friends for the complete restoration of his failing health. Prior to his bidding good-bye to the members of his class at the college, he was presented by them with a costly and elegantly engraved gold watch, as a souvenir of their affectionate regard. When he proceeded to take the train at the station, he found there several hundreds of the college students who loudly cheered him as he set out upon his long journey.

Editorial.

ANNUAL REPORT OF THE NATIONAL BOARD OF HEALTH, FOR 1879. Washington, D. C., January 1, 1880.

We have just received the *National Board of Health Bulletin*, with a supplement containing the regular annual report of the national health board, and we are sure the readers of the JOURNAL AND EXAMINER will be interested in knowing what the board has accomplished during the first year of its existence, and what it proposes to do in the future; hence we shall make copious extracts from the report. With rather questionable good taste, the board commences its report, not only with an account of its own organization, but also with copies of the cordial indorsements given to it by the American Public Health Association and the National Academy of Sciences. The past and future work of the board is then given as follows:

"II. The collecting of information with regard to the sanitary condition of some of the principal cities and towns in the United States. Work in this direction was organized at the first session of the board by the printing, with additions and corrections, of a series of schedules of questions for the sanitary survey of a city, the original schedules for this purpose having been prepared several years previously by a committee of the American Public Health Association. A number of these schedules have been returned to the board properly filled up, and others are in course of completion. It is believed that the result has already been good in indicating the lines of inquiry which should be pursued by municipal authorities in relation to sanitary matters, and that hereafter a large amount of valuable information will be collected by this means.

"III. The appointment of a commission to investigate yellow fever in the Island of Cuba. The commission, generally known as the Havana Yellow Fever Commission, consisting of Dr. S. E. Chaillé and Col. T. S. Hardie, C. E., of New Orleans; Dr. John Guiterás, of Philadelphia, and Surgeon George M. Sternberg, U. S. A., sailed for Havana on the 4th of July and returned on the 4th of October. The preliminary report of this commission has been printed as a supplement to the *National Board of Health Bulletin*, and a copy is herewith appended, marked B.

"From this report it appears that yellow fever must be considered as endemic in the Island of Cuba, and that for many years it has prevailed annually in the principal ports. The facts presented do not confirm the theory of the spontaneous origin of the yellow-fever poison on board ships, and make it improbable that the cleansing of the harbor of Havana and the constant renewal of its waters, however desirable, would prevent the infection of the shipping at this port. Attention is especially invited to that portion of the report which gives an account of the obstacles placed by the authorities of Cuba in the way of the execution of the law approved June 3, 1879, and to the action taken by the governor-general of Cuba in July, 1866, declaring foul all the ports of the United States, and decreeing that all vessels arriving from them at the ports of Cuba should be subjected to the most rigorous quarantine, in consequence of the report of cholera having appeared in Philadelphia. The recommendation of the report that an attempt should be made to establish an international sanitary code, and the reasons given therefor, also merit careful consideration. In this connection, however, it is to be remarked that, under the existing constitution of the United States, and the construction placed by judicial authorities as to the scope of the police powers of the several States, it may be impossible that the United States government should become a party to any international code of quarantine, properly so called, for the reason that it would be impossible to guarantee that, if such a code were agreed upon and a vessel coming from a foreign port had complied with all its requirements, such vessels could be admitted into any port of the United States, since it is within the power of any State, and of many municipalities, to impose a quarantine of delay, or even of

non-intercourse, upon any vessel arriving at their port or ports. It is for this reason that the board has attempted to secure at present only an international system of notification as to the sanitary condition of ports and vessels.

"IV. The sanitary committee of the board on sanitary legislation, consisting of Drs. H. I. Bowditch, S. M. Bemiss and Stephen Smith, has employed a competent legal authority of Boston to collect and collate the sanitary laws of the United States and of the several States, including not only the statutes, but the decisions of the several courts, on all questions involving the public health. A copy of this work is herewith appended, marked C.

"This compilation is of such immediate practical interest and utility to all who are interested in sanitary legislation, that it is recommended that authority be at once granted for having it printed as a separate volume.

"It needs but a brief examination of this record to show that the sanitary legislation of the great majority of the States is in a very unsatisfactory condition. Even those which have provided State boards of health have not done so on any uniform or well-considered plan; and very few of such State boards are so organized as to be able to meet the emergencies of an epidemic.

"It is hoped that the publication of this compilation of sanitary law will be one means of securing efficiency, and, to a certain extent, uniformity, in both State and municipal sanitary legislation throughout the country.

"V. At the request of the board, an investigation as to the best method of determining the amount and character of organic matter in the air has been undertaken by Prof. Ira Remsen, of the Johns Hopkins University of Baltimore. A copy of the preliminary report of Prof. Remsen on this subject is herewith submitted, marked D.

"VI. An investigation as to the effects of disinfectants, and especially of those used for disinfecting inclosed spaces, has been undertaken by Dr. W. S. Bigelow, of Boston, assisted by Dr. H. P. Bowditch, professor of physiology, and Dr. Wood, professor of chemistry, of Harvard University, the whole being under the

general direction and advice of Dr. C. F. Folsom, secretary State board of health of Massachusetts.

"VII. An investigation as to the composition and merits of the various patent disinfectants, which has been made at the request of the board, by Prof. C. F. Chandler, of Columbia College, president of the board of health of New York City.

"VIII. An investigation as to the prevalence of adulterations in food or drugs in the United States, under the direction of Dr. H. A. Johnson, chairman of the standing committee on this subject. In this connection a paper upon the deteriorations and adulterations of food has been prepared for the board by Dr. R. M. Kedzie, president of the State board of health of Michigan, and a paper on the adulterations of drugs, by Prof. L. Diehl, of Louisville, Ky. Copies of these reports are herewith appended, marked E and F.

"IX. A preliminary inquiry as to the diseases of food-producing animals of the United States and the legislation, whether State or national, which seems desirable in regard to this subject.

"This has been under the direction of a standing committee of the board composed of Drs. J. L. Cabell, T. S. Verdi and P. H. Bailhache, and special reports upon the subject for this committee have been prepared by Prof. James Law, of Cornell University, New York, by A. Laintard, veterenary surgeon, New York, and by T. S. Verdi, member of the board. Copies of these reports are herewith appended, marked G.

"X. An investigation of the flow of sewers in relation to their sizes and gradients.

"This work has been carried on under the direction of Col. George E. Waring, jr., of Newport R. I., with a view to determining the most efficient and least expensive form of sewers.

"The preliminary report of Col. Waring on this subject is herewith appended and marked H. The investigation is still in progress, and will be completed during the ensuing spring.

"It may be observed that the results of this investigation have already been of practical importance, since it was the presentation of a portion of these results to the committee charged with the sanitary survey of Memphis which led that committee to recommend a scheme for the sewerage of that city, based on the researches

of Col. Waring, estimated to cost $225,000, in preference to a plan of sewerage prepared in the ordinary manner and estimated to cost $500,000.

"XI. A sanitary survey of the eastern coast of New Jersey, bordering on New York harbor is in progress, with the aid of this board, under the direction of the State board of health of New Jersey.

"XII. A sanitary survey of the city of Memphis, Tenn. This was commenced as soon after the close of the epidemic as possible, and is still going on, being under the direction of a special committee of the National Board of Health, of which Dr. J. S. Billings is chairman. A preliminary report of this committee, prepared to meet the urgent demand on the part of the municipal authorities for advice as to the course to be pursued is herewith submitted, marked K.

"XIII. An investigation as to the hygiene of the mercantile marine and as to what legislation is expedient to improve its sanitary condition. The report of Surgeon P. H. Bailhache, U. S. M. H. S., especially detailed by the chief of that bureau to prepare this report, is herewith submitted, marked L.

"XIV. An investigation by Dr. Elisha Harris, of New York, upon diphtheria, as it occurred in Northern Vermont, which is herewith submitted, marked M.

"XV. An investigation by Prof. Raphael Pumpelly, of the United States Geological Survey, upon the influence of various soils upon sanitation, especially with regard to drainage and methods of disposal of excreta. This has been but recently authorized."

The foregoing extract certainly indicates that the board has been active and comprehensive in the consideration of all subjects properly coming before it and in carefully planning investigations of importance, some of which will require several years to complete. The report next details what has been undertaken and accomplished in reference to quarantine regulations and the establishment of an international system of notification concerning the prevalence of infectious diseases.

The following extract concludes this part of the report:

"The great majority of quarantine establishments on our sea-

ports are either improperly located or do not possess the facilities necessary for properly dealing with infected ships, many of them amounting to little more, practically, than inspecting and boarding stations. Owing to the epidemic of the previous summer, unusual care has been exercised by the inspecting and boarding officers at the various quarantine stations, and no satisfactory evidence has been presented to the board that any outbreak of contagious or infectious disease has occurred in this country from importation during the present year. That this is the case, however, must be attributed mainly to good fortune and the fact that no dangerously infected ship has arrived at certain quarantine stations.

"It is not considered by the board to be necessary or desirable that every seaport in the United States, nor even that the majority of ports, should possess a complete quarantine establishment, including boats, lighters, wharves, warehouses, hospitals and other buildings necessary to properly care for an infected ship and its cargo, passengers, and crew in such a manner that there shall be as little detention or interference with commerce as possible, since such establishments are expensive both to establish and to maintain, and at many ports no infected ship might arrive for several years.

"It has therefore been decided that, for the present at all events, such complete quarantine establishments are only needed at Boston, New York, Philadelphia, Baltimore, near the mouth of the Chesapeake Bay, Wilmington, Charleston, Savannah, near Brunswick, Ga., or Fernandina, Fla., near Ship Island, Miss., and at some point on the Texas coast.

"The station at the mouth of Chesapeake Bay would care for some, if not all, infected vessels bound for Baltimore, Annapolis, Washington, Fredericksburg, Richmond, Norfolk and Petersburg, and would deal also with infected vessels bound for northern ports, which in their distress and in an emergency may put into Hampton Roads. The station near Brunswick or Fernandina has not yet been positively decided on. If established, it would care for infected vessels destined for ports on the Atlantic coast between Savannah and Key West. The quarantine station at Ship Island would be devoted to the treatment of infected vessels destined for the Gulf ports between and including Pensacola and

New Orleans, which would include the smaller ports of the Gulf coast of Florida, Alabama, Mississippi and Louisiana. The total expense of establishing these three quarantine stations is estimated at $100,000, and as each one of them is for the protection of several States, it seems eminently proper and desirable that they should be equipped and maintained by the United States.

"In addition to this there should be expended at other ports about $65,000. This work should be done at once in order to secure during this winter, as far as possible, satisfactory quarantine arrangements on the South Atlantic and Gulf coasts, to secure the prevention of the introduction of yellow fever through any of these ports. It is the opinion of the board that if, during the present winter, at all points where the fever has prevailed during the past summer, care be taken to obtain thorough ventilation and exposure to cold of all houses and inclosed spaces, and of all bedding, clothing, etc., and if local sanitation be vigorously and properly carried out, there will be little danger of an epidemic of yellow fever next year from causes now existing in the country. The board is using all its influence to induce local authorities to insure this cleansing, ventilation, etc., and has reason to believe that much will be accomplished before warm weather again sets in. Under these circumstances, the board is of the opinion that it is its duty to use the means at its command to have the maritime quarantine stations of the country placed in proper condition at once, in order that they may be ready to meet any emergency not later than the first of May; and it therefore proposes to go on and carry out the plans above suggested without delay.

"With regard to inland quarantines and quarantine stations, much must of course depend upon the existence of contagious or infectious disease, requiring their establishment. Irrespective of this, however, it is believed by the board that inspecting stations for steamboats should be established on the Mississippi river, at which all boats should be examined by competent inspectors, and certificates as to the sanitary condition of the boat given. This inspection should be carried on throughout the summer at all events, irrespective of the existence of yellow fever or other contagious or infectious disease in New Orleans or other ports upon the river, and it should apply to boats going south as well as to

those going north. That such an inspection, under the auspices of this board, would be acceptable to owners of steamboat lines on the Mississippi, the board has satisfactory evidence.

"Inspecting stations for this purpose should be located at New Orleans, Vicksburg, just below Memphis, and at Cairo. At each of these stations inspecting officers should be provided with a steam-launch so arranged that in most cases the inspection could be made with little or no hinderance, or but slight delay, to the boat. At Vicksburg, Memphis, and Cairo, the stations should be so located that arrangements can be made on shore, by means of tents, etc., to deal with an infected boat should occasion present. In addition to these stations and the boats, tents, and furniture connected with them, there should be provided for the use of the board on the Mississippi river a small and fast steamboat to be used as a patrol boat, more especially for visiting places on the river reported as infected, but which are remote from railroad communication. It is often extremely difficult to obtain access to such places within any reasonable space of time, since none of the steamboats plying on the river will land at them for fear of being quarantined at other points, and there is usually a non-intercourse, "shot-gun" quarantine established around them from the land side. The result is the rapid spread of the fever, great suffering, and ultimate danger to the surrounding country. Had the board had such a boat as above indicated at its command during the past summer it is probable that relief might have been promptly afforded to Concordia and vicinity, and that much suffering and loss of life might have been prevented. The total cost for establishing these inspecting stations and for the purchase of a small steamboat which shall be capable of making about fifteen miles an hour against the current and carrying three or four tons of freight in the shape of medical supplies, etc., is estimated at $35,000, and the board proposes to proceed at once to take the necessary steps to carry out this recommendation for the same reason as that given for acting at once with regard to the maritime quarantines, viz, that they may be ready for active operations not later than the first of May."

A brief history of the origin and progress of the yellow fever in Memphis and New Orleans in 1879 is given; following which

are the rules and regulations governing the board in regard to the rendering of aid to State and local boards of health, which have already been published in this journal. The report closes with a financial estimate of the amount of money that will be needed for carrying on its operations during the next fiscal year. The total expenditures of the board to the present date are $154,002.42. The amount needed for the next six months is estimated to be $284,330 and for the twelve months following, carrying the time to June 30, 1881, $202,050; making the total asked for to meet the wants of the board for the next eighteen months, $486,390.

Not only from this annual report, but from all we have learned of the doings of the national board thus far, we are satisfied that its members have devoted all the time and attention to the duties assigned them that could have been reasonably expected; and have accomplished as much as was possible to accomplish in the brief time which has elapsed since their appointment.

In regard to the abstract question, whether the permanent establishment of a national board of health is desirable or necessary, we would say that from principle we are opposed to that tendency which is everywhere apparent, to look to government for doing those things that the people are capable of doing for themselves; and especially are we opposed to the multiplication of governmental departments, bureaus, boards, etc. For, the more complicated is made the machinery of governments, the greater is the expense in proportion to the work accomplished. As all regulations in relation to the gathering of vital statistics and the carrying on of local sanitary improvements must emanate from the State and municipal governments, leaving the general government with proper jurisdiction over the sanitary matters connected with the army, navy, and commercial intercourse between the States and with foreign countries only, it has seemed to us that the already efficiently organized medical departments of the army, navy and Marine Hospital service, afforded all necessary channels for the operations of the general government, while the American Public Health Association constitutes a very proper head and bond of union for the State and local sanitary and health organizations. D.

THE METRIC SYSTEM IN MEDICINE.—We have not taken any measures to ascertain how far the druggists of this city or in the country have provided themselves with the means for filling prescriptions written in accordance with the metric system of weights and measures. We are quite sure, however, that in this city, and probably in all the more important towns in the country, they are so far prepared that no danger would attend the full, practical adoption of the system by physicians in their daily routine of practice. That the system has many advantages over the one hitherto in use, is manifest to all who have given it a fair trial. First. It enables us to express all the ingredients of a prescription in the same measure, instead of mixing grains, scruples, drachms and ounces. Second. It enables us to make a much more minute and accurate proportion of ingredients in prescriptions containing one or more articles, the doses of which are but the small fraction of a grain. For instance, in prescribing the bi-chloride of mercury with the tincture of cinchona: to get a proper relative dose of each for ordinary tonic and alterant purposes, there should be only one grain of the bi-chloride to four ounces of the tincture. But to order a four-ounce vial of medicine for a child of such age that the proper dose would be only eight or ten minims three times a day, looks like making a prescription that is to last something less than a year; yet we have always felt unsafe to order less than one grain of anything under the old system of weights. But with weights and apparatus for weighing grams, decigrams, centigrams, and milligrams, the various ingredients in a prescription may be adjusted with the utmost minuteness and accuracy. What we have said of the grain, applies equally to the scruple, drachm and ounce. We have a well understood sign in the "ss" for half a drachm or half an ounce, but none for one-third or one-quarter of a drachm or ounce. Therefore, while we can readily write ℥iiss, if we desire to express another ingredient in the same prescription at two ounces and a quarter, we must write it ℥xviii; if another in two and one-third ounces, we should be obliged to express it in ʒlvi. Third. The use of the decimal in the multiplication and division of quantities in the metric system is very much more simple and convenient than any other, as soon as we become accustomed to its use. It was not our purpose, however, at the

present time, to discuss the advantages or disadvantages of the metric system, but rather to urge the importance of having the profession decide with more promptness whether to adopt the system or not. It has been sanctioned and its adoption recommended by most of the important medical organizations, from the American Medical Association to many of the local societies. But at the present time its practical adoption is in a very mixed condition. Some medical teachers use it, and others, even in the same faculty, do not. Some writers and publishers adhere to the old system; others adopt the new; and still others give both. And the same is true of the individual practitioners.

This uncertain and mixed state of things should not continue long. It is already beginning to discourage some who had from the first earnestly adopted the metric system, under the expectation that such adoption was speedily to become general. If it is really desirable to introduce this system into universal use in our profession, steps should be taken without delay to secure some concert of action on the part of the teachers in medical colleges, the editors of medical periodicals, and the writers and publishers of medical books. The parties composing these three classes have it in their power to completely control the whole matter. If those engaged in medical teaching would use the language of the metric system in giving instruction; those editing medical journals, for the first year give all formulas in both systems, and after that period only in the metric; and those writing and publishing new works, do the same; in less than five years the new system would become as familiar to the great mass of the profession as the old one is now, and the transition would be practically complete.

Could not such concert of action as we suggest be easily obtained? There is a National Association of American Medical Editors, and an American Medical College Association, both of which are expected to hold meetings in close connection with the annual meeting of the American Medical Association, in New York, the first week in June next; and we suggest that this subject would constitute an important topic for full consideration at those meetings. The American Association of Medical Editors was organized in 1869, and has held a short meeting annually

since, doing little else than to listen to an address from the president, and elect new officers. We suggest to all our brother editors the propriety of giving this subject some attention, and coming together at the next meeting of our association, prepared to take definite and controlling action concerning it. We say *controlling* action, because the unanimous adoption of the system by the medical periodical press would soon induce co-operative action on the part of both medical teachers and book publishers.

D.

EXTIRPATION OF THE UTERUS.—In a recent operative clinic in the Mercy Hospital, Prof. E. W. Jenks, Professor of Gynæcology in the Chicago Medical College, found it necessary to remove the *entire uterus* on account of malignant disease. Of course it involved a free opening through the pelvis into the abdominal cavity, and a temporary escape of the intestines. These were carefully replaced, and the operation finished by closing the vaginal opening with silver sutures. The patient sustained the operation well, and subsequently made a rapid and complete recovery. She left the hospital a few days since for her home, able to walk about freely.

SOUTHERN ILLINOIS MEDICAL ASSOCIATION.—The recent annual meeting of this society appears to have been unusually well attended, and was an occasion of much interest and profit to its members. Drs. Hughes, Engleman and others were present from St. Louis, and addressed the meeting. The Southern Illinois Medical Association embraces a large territory in the Southwestern part of the State, and its members will doubtless give a cordial reception to the State Medical Society, which holds its next annual meeting at Belleville, on the third Tuesday in May next.

DR. WM. T. BELFIELD, of this city, is making preparations with a view to spending several months in Vienna, engaged in the special study of pathology. While there, he will be the special correspondent of the CHICAGO MEDICAL JOURNAL AND EXAMINER, and we shall take pleasure in laying before our readers the monthly labor of his ready pen.

Selections.

OSTEOCEPHALOMA OF THE THIGH. Report to the Wisconsin State Medical Society. By J. G. MEACHAM, JR., M. D., of Racine.

On the tenth day of March, 1877, George G———, a young man of about twenty years of age, of German descent, came to my office to consult me about a tumor of his left thigh. He stated that for several years there had been on the outer side of the thigh a flat bunch, oval in outline, about two inches in diamter, which up to six months previous had given him no trouble, and had shown no signs of growth, but at that time, September, 1876, after violent exercise by jumping, it began to grow and had continued its development until the present time.

An examination of the tumor located it on the outer side of the left thigh, occupying the middle two-fourths in length, and firmly adherent to the bone. Its transverse diameter was greater than its anterio-posterior diameter, thereby presenting a broad flattened aspect. Its upper half was harder and less elastic than the lower part, and its general form was globular. The surface was somewhat lobulated, purple in color, smooth and glossy, having numerous tortuous veins ramifying over it. The thigh was not at all increased in size along its inner line, and but slightly enlarged in front or behind, but outward the growth stood prominent and bold.

A measurement around its largest part at the middle of the thigh gave twenty-five inches; two inches below this it measured twenty-two inches, while two inches lower still it was only fifteen inches, the natural circumference of his thigh. Some, though not severe, darting pains were felt in the tumor, but it was complained of most as an encumbrance by its size and weight.

The physical powers of the body at this time were somewhat enfeebled, and there was emaciation, notwithstanding the subject was always thin and spare, weighing but one hundred and nineteen pounds when in health. The countenance was pale and expressive of anxiety and suffering, evidencing cachexia. The patient, however, regularly followed his usual occupation, that of engineer, and walked nearly a mile to and from the shop in which he was employed.

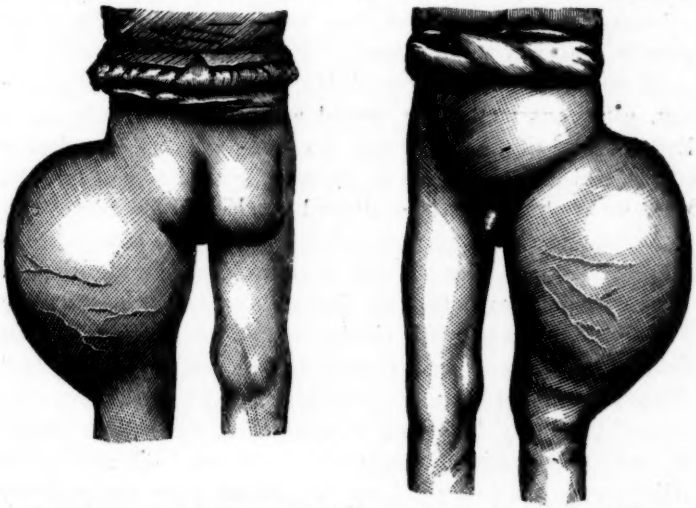
The one thought in my mind regarding this large and rapidly growing tumor was, that it was osteo-cancer, already beyond the reach of human aid. M. Amedée Forget, a French surgeon, in speaking of malignant osseous growths, asks this question: "Are there not, in the present state of science, clinical characters indicating to the surgeon whether or not to operate?" In this case, it seemed to me that the rapid growth, the peculiar form, the pain, the evident cachexia and emaciation, and the unfavorable location, were clinical characters enough to indicate the best thing to do, namely, let it alone. It was too large to be removed in any way, except, perhaps, by amputation at the hip-joint; but, considering the very great danger to life attending that operation, together with the probable infiltration of cancer-cells in the adjoining parts, it seemed best and consistent with good judgment, to discourage surgical interference and experiment, and to advise him to enjoy, under palliative means, his remaining months or years as best he could.

About four weeks subsequent to this he called again. There was no special change of growth in size or appearance. My father, Dr. J. G. Meachem, was present, and concurred in the diagnosis and advice I had previously given. Photographs of the tumor, made at that time, I now show you.*

Eight months had passed when the patient again came under observation at the office. During the time he had been subjected to all kinds of treatment by the usual number of medical pretenders that follow up a lingering, incurable case. His condition was one of greater weakness than before, with much more marked emaciation; the skin was of the hue peculiar to cancer cachexia, and the suffering was more acute and severe. The growth had

* Photographs were exhibited showing anterior and posterior views.

extended below nearly to the knee, and above to the hip, but did not yet interfere with motion in either joint. It also had overlapped the thigh anteriorly and posteriorly to its inner line. It now measured thirty-six and one-half inches in circumference at its middle, and thirty-two inches around two inches lower down, having, therefore, increased eleven and one-half inches, and this increase relatively the same throughout the entire mass. An appearance of still greater size was manifest in contrast to the greater emaciation of surrounding parts. A second photograph was made, and by comparing one with the other, the real increase is plainly shown. Up to this time he had followed his work, but now was obliged to remain at home, its bulk preventing locomotion.



OSTEOCEPHALOMA.—Anterior and posterior views when the tumor measured forty inches in circumference.—From photographs.

During the next two months it increased to forty inches. His weight at this time was one hundred and eighty-nine pounds. From this on for six months the usual condition of progressing emaciation and weakness continued, while the morbid growth enlarged day by day until it reached a size measuring fifty-eight inches (*nearly five feet*) in circumference. It now obliterated every natural outline of the thigh, hanging down over the knee, and encroaching on the abdomen above. The relative shape was

retained throughout its development. The skin was still intact, though very thin, and from the peculiar velvety feel in places, I think ulceration would have occurred soon. There was also evidence of deep fluctuation.

I believe pus is seldom if ever found in malignant growths, for the simple reason that the action is not inflammatory but rather a process by which the cells assume such a property of self-multiplication that their normal relation and mode of arrangement is destroyed. (Bennett.)

Dr. F. H. Hamilton says that portions of the tumor have usually an elastic feel, leading often to the suspicion that it contains pus. The word "suspicion," I take it, refers to a supposed existence of something that does not exist, and that in these growths pus will not be found. Not unfrequently, however, small cavities filled with clotted blood, dirty-looking serum, or soft, gelatinous matter are formed within them (Gross); and a knowledge of this, together with a consideration of the vitality of the patient, caused me to refuse a demand to puncture the mass, and to insist that it be allowed to take its own course.

A friend of the young man called another practitioner to see the case, who at once plunged a trocar deep into the softened portion, giving escape to about six quarts of dark-colored watery fluid. There was but little change in shape on the escape of this fluid. The water of decomposition and the serum of the blood dripped constantly from the opening, draining his life away. Air entered the cavity, hastening decomposition; gases formed rapidly, and it was amid a stench unbearable that death came to his relief on the fourth day. I was not present when the puncture was made, but from the young man's mother I ascertained the amount of fluid that escaped at the first gush.

Twenty-four hours after death I was sent for to incise the tumor (which I did), to facilitate the placing of the body in the largest size coffin made. Circumstances and conditions were such on that day that no satisfactory post-mortem examination could be obtained. The day following the interment it came about that the relatives of the deceased should exhume the body and grant me permission to remove and have the tumor and thigh-bone. The body was exhumed, and I disarticulated the thigh.

The cavity seemed hardly large enough to have contained the quantity of fluid said to have escaped when tapped. It still held a little dark grumous fluid, such as results from disintegration of tissue; also some soft, white, brain-like matter, but no pus was to be seen. Throughout the entire mass were numerous pieces of cancellated bone-structure that had been formed in the progress of the disease. They radiated in every direction, uniting themselves one with another, forming a framework to the entire growth. The interspaces were gelatinous and brain-like, only a limited amount of cartilage being observed, and that in the upper part. The muscular structure was past recognition. The soft parts were under rapid decomposition, and it became necessary to hasten maceration.

The femur, as cleaned, shows that the disease involved nearly the entire bone; a small portion of the lower end, and the articular cartilage of the head of the bone, alone being exempt. This latter corresponds to a fact pointed out long ago by Petit, "that although the epiphysis may have been completely converted into encephaloid matter, the cartilage of incrustation and of the neighboring joint never becomes implicated, and this, although the growth may eventually involve and include the whole of the rest of the articulation by extension to the capsule and the soft parts." (Erichsen.)

The shaft at its middle was bent and twisted upon itself about forty-five degrees, probably by the great weight of the growth dragging it outward and backward. Radiating spicula stood out in all directions from the entire surface of the shaft. There were also pillar-like projections reaching outward to the cancellated formations, bracing and supporting all. The greatest density of bone was behind and below the trochanter major, which, corresponding to the point first complained of, would seem to locate the original site of disease, from thence extending down along the shaft. Morbid action undoubtedly began beneath the periosteum. During maceration, large numbers of pieces of cancellated bone separated from the femur, and I present them here with the femur, for your inspection to-day.* Portions of some of them

* Pieces of all sizes, sufficient to fill a half-peck measure.

have become compact bone structures, and several others have calcareous deposits upon their surfaces.

The lowest two inches of the femur is much broader and thicker than natural, not wholly from the disease, I think, but from a peculiar development belonging to a heredity that exists in the family, about which mention will be made further on.

A photograph of the bone, made to a scale of one-fourth inch to the inch, shows the enormous bulk of the osseous structure belonging to this pathological specimen. The comparative size is seen by the natural femur at its side.

The nature of the growth was unquestionably cancerous, and known as osteocephaloma. It could in no wise be confounded with any other growth, except that form of enchondroma, where portions of the cartilaginous element become converted into bone and when by a certain softening, some of the characteristics of soft cancer are presented. Indeed, there are several conditions common to both. The shape or form may be globular, ovoid or lobulated in both. The surface may present the same smooth, tense, glossy appearance. The soft feel, or high degree of elasticity in either, may convey a sense of fluctuation. The tendency to take on rapid growth in one, is kindred to that of the other. But in addition to the similarities, there is in our case sharper pain, which is a very marked accompaniment in cancerous affections; an unusually rapid growth (two and one-half years), not so common in cartilaginous developments; an emaciation and cachexy peculiar to cancer; and on section a small amount of cartilage, and a great amount of gelatinous and brain-like matter found, all giving greater probability of the presence of encephaloid disease. If the presence of fluid within the growth suggests to the minds of any of you cystic disease or cystoma, I would say simply that there was no membranous or osseous envelope, without which there could be no cyst. Central softening of the mass gave opportunity for the accumulation of fluid, under the same laws that govern the passive accumulation of fluids in the natural serous cavities of the body when there is existing neighboring disease.

The remarkable size of the morbid growth I would specially notice. Upon this point I have taken pains to consult such authorities as

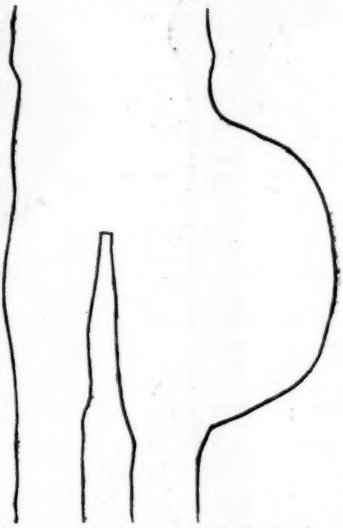
have been at my command, namely: Mott's Velpeau, Druitt, Erichsen, Gross, Hamilton, Bennett, Holmes, and Agnew, and about one hundred volumes of different medical journals. Most of these authors use expressions wholly indefinite, such as "considerable size," "large bulk," "great magnitude," "extraordinary development," etc., etc. A cocoanut and child's head are

OSTEOCEPHALOMA OF LEFT FEMUR.—A few of the pieces that separated during maceration shown. A natural femur to show contrast. From photograph.

instanced as representing the size of large osseous tumors. In the CHICAGO MEDICAL JOURNAL AND EXAMINER for December, 1877, is a synopsis of a case of malignant osseous tumor of the femur that measured twenty-five inches in circumference. In Dr.

Druitt's Surgery, edition of 1867, mention is made of a case of enchondroma by Dr. Frogley that reached a circumference of three feet, and another by Dr. Paget that was as large as a man's chest. These examples of large tumors are far short of the size of the one under consideration, and I am bold to say, that so far as I can ascertain, this is the largest growth from diseased bone that has been brought to the attention of the profession.

Its weight I have estimated to have been at least *one hundred and twenty-four pounds*, and this estimate is based upon the knowledge of the weight of the patient in health, one hundred and nineteen pounds, and when the tumor measured forty inches, one hundred and eighty-nine pounds, an increase of seventy pounds at that time. A further increase of growth of ten inches in circumference adds one-fifth in bulk, and weight fourteen pounds. The general emaciation of body usually amounts to between three and four ninths of the original weight, which would be from forty to fifty pounds. These sums, seventy, fourteen, and forty at least, aggregate a weight of one hundred and twenty-four pounds. This morbid growth, then, attained a weight greater than that of the healthy man himself.



OUTLINE DRAWING SHOWING TUMOR AT DEATH.—Fifty-eight inches in circumferance. Two years and two months of active growth.

I have now given the history and course of this case as they have come under my observation. I wish now to show a heredity that had much to do with the remarkable development just considered. On the mother's side I find nothing relative to any heredity, all having lived to good old age. On the father's side I find that all the ancestors were short-lived people, very few living more than fifty years. The father belonged to a family line, in the mining regions of Dolheim, Prussia, that had intermarried

for several generations. He was feeble when born, and was seven years of age before he could walk; and as he grew to manhood, he was unable to do vigorous work, and was exempted from the required term of service in the Prussian army. His joints were large, loose and clumsy, and the protuberances of the bones unusually prominent. A brother and sister had similar peculiarly-formed joints. He was the father of twelve children, and in them is shown in a remarkable way the heritage transmitted through a diseased parent:

C—, first child, dead, had enlarged ends of tibia and femur at knee-joints.

M—, second child, dead, had large broad knees, with loose articulations.

J—, third child, dead, constitutionally feeble.

J—, fourth child, living, has flat, broad knee, condyles very prominent.

C—, fifth child, living, has an exostosis one and one-half inches in diameter on outside of right femur.

G—, sixth child, the subject of this paper. In addition to the tumor described, there was an exostosis two inches in diameter projecting an inch above the surface, on the inner side of right tibia, as shown in the photograph.

L—, seventh child, living, has a sesamoid bone on the inner side of left knee, apparently in the tendon of the sartorius muscle as it passes behind the inner condyle of the femur. General health feeble.

M—, eighth child, living, has a sesamoid bone near left ankle-joint.

M—, ninth child, living, natural.

S—, tenth child, living, has an unnatural articulation at fifth metacarpo phalangeal joint of left hand.

J— B—, eleventh child, living, natural.

P—, twelfth child, living, natural.

It will be seen, therefore, from this list that nine of the twelve children have shown visible evidence of heredity in enlarged or malformed bones. Nor is this all; a child, now dead, born to C——, the fifth child, had congenital exostosis on the shaft of the right ulna. And the peculiarly formed knees, common to so

many of the family, are observed in a second child now living. This is evidence of heredity in three successive generations to my knowledge.

It is not probable, however, that this hereditary predisposition to localize deposit of bone material has to do with the malignancy of the growth described, but it has much to do with its unusual size and the formation of the bony structure within it, conjointly with the progress of the more active cancerous affection.

The lower extremity of the bone, as shown in the photograph, is more than twice as large as a natural femur at the same point. This is partly due to hypertrophy from disease; but in addition it represents the peculiar form and shape of the extremities of the bones at the joints referred to when tracing the family history. To sum up the interesting points of this case, we may notice:

1st. The existence of an exostosis excited to active growth by violent exercise, augmented by a hereditary tendency to deposit bone material, and finally degenerating into a condition of malignancy.

2d. The site of disease. Osseous tumors of the femur generally appear on the inner side at the lower extremity of the bone. This had a directly opposite location, appearing on the outer side at the upper extremity.

3d. Rapid growth; which in two and one-half years attained a size measuring fifty-eight inches (nearly five feet) in circumference, and a weight of one hundred and twenty-four pounds; and

4th. The awakening of a heredity shown in three successive generations, that in this case was roused to action under proper cause and conditions.

Besides the regular physicians of Racine, Dr. E. B. Wolcott, of Milwaukee, saw the tumor when in an advanced stage of development.

IN order to relieve hiccough, inflate the lungs as fully as possible, and thus press steadily and firmly upon the agitated diaphragm. In a few seconds, the spasmodic action of that muscle will cease.

Obituary.

SURGEON-GENERAL E. B. WOLCOTT.

Dr. Erastus B. Wolcott, Surgeon-General of the State of Wisconsin, one of the most widely known men of the Northwest, died at his residence on Milwaukee street at 11 o'clock Jan. 5th, after an illness of one week. There are few men whose death would cause more general sorrow; few men have worked as faithfully and unselfishly, as long and laboriously, in one of the most noble of professions, as Dr. Wolcott. The announcement made this morning will carry pain to hundreds of households where the cheerful face of Dr. Wolcott has brought hope and his skill has brought relief from suffering.

Erastus B. Wolcott, M.D., was born at Benton, Yates county, New York, October 18, 1804, son of Elisha and Ann Hull Wolcott, who came from Litchfield county, Connecticut and were among the first settlers in that section of country. In 1822 Dr. Wolcott commenced the study of medicine and surgery with Dr. Joshua Lee, an eminent physician and surgeon of Central New York, and received a diploma from Yates County Medical Society in 1825. He attended the College of Physicians and Surgeons of the Western District of New York from 1830 to 1833, and took his degree in medicine and surgery at that institution. In the spring of 1835 he was examined by a board of army surgeons and received an appointment as surgeon in the United States army, Jan. 1, 1836. He resigned in 1839 and came to Milwaukee. In 1836 he married Elizabeth J. Dousman, who died in 1860, leaving a daughter and a son. Dr. Wolcott gave his children a liberal education, the former having graduated at Milwaukee Female college, and the latter at Yale college.

Dr. Wolcott was connected with some of the earliest enterprises of the State. He built the first mills at West Bend, and with others the first mill at Humboldt, near the city. He was one of the prime movers in building the first railroad in the State, from Milwaukee to the Mississippi River, and among the first in the Northwestern life insurance company. He was appointed trustee of the Wisconsin Hospital for the Insane, the first year, and re-appointed through Gov. Randall's and Gov. Lewis' administrations. He was appointed one of the regents of the State university in 1850. He was appointed surgeon of the State militia as early as 1842, by Gov. Doty, was commissioned colonel of a regiment in 1846, and in the same year major-general of the first division of Wisconsin militia. He held through the war of the rebellion the position of surgeon-general of Wisconsin, with the rank of brigadier-general, which he retained to the day of his death. In 1866 Dr. Wolcott was appointed by Gov. Fairchild commissioner to represent Wisconsin at the universal exposition at Paris in 1877. In the same year he was appointed by Congress manager of the National Home for Disabled Volunteers, near this city, to which position he was re-appointed in 1875.

Dr. Wolcott was married Oct. 12, 1869, to Laura J. Ross, M. D., who was among the first women who graduated in medicine and received hospital instruction in this country. Dr. Wolcott was a lineal descendant of Henry Wolcott, Esq., a landed gentleman of England, who came to America in 1630. He was the son and heir of John Wolcott, of Golden Manor. The manor house is still standing in England, is of great antiquity, and richly ornamented with carved work. Upon the walls may be seen the motto of the family coat of arms: *Nullius addictus jurare in verba magistri* (inclined to swear on the words of no master.) This sentiment was in harmony of the spirit of the English gentlemen of the middle ages and that of the Puritan of a later date, who spurned the dictation of ecclesiastical wisdom. This peculiarity of the family lost none of its force in the character of Dr. E. B. Wolcott, who derived his knowledge of the Author of all things from the study of His works.

Henry Wolcott, of the old English gentry, was the first magis-

trate in the Connecticut colony, and his descendants in a direct line for over one hundred and eighty years, were counselors of war, officers of the army during the revolution, one a signer of the Declaration of Independence, representatives and senators in congress, chief justices of the supreme court, and six governors of Connecticut, three bearing the name of Wolcott—Roger, Oliver and Oliver junior. Roger Wolcott, the first governor of Connecticut, was judge of the county court, deputy governor, chief justice of the Superior court, and governor of the State. He lived to see his son Oliver governor during fourteen years, and his grandson Oliver during four years. Of his descendants bearing the name of Wolcott, twelve were graduates of Yale college, two of Harvard university, and two at other New England colleges previous to the year 1834. Those qualities which characterized the ancestors of Dr. E. B. Wolcott, whether by hereditary descent, by example, or education, seemed to have culminated in him. His form was symmetrical, his movements graceful and almost up to the day of his death his youthful energy seemed unimpaired. His mind was vigorous and active, embracing a wide field of observation. Always eminent in his profession, he kept a steady step in the march of medical science Skilled as a surgeon, the knife never trembled in his hand. Unerring in his diagnosis, he waited with the patience of a nurse. His sensibilities were always keenly alive to every object of human suffering. As a son, husband, father and friend he discharged his duties with scrupulous fidelity. We have been told that Cervantes "smiled the chivalry of Sham away." If so, she, like Liberty, took her flight to the new world, and found worshippers in its forests. If truth, justice, honor and mercy are her characteristics they were all happily personated in the character of the late Dr. E. B. Wolcott.

A week before his death, at the solicitation of members of the profession at Horicon, Dr. Wolcott generously left his business to give testimony as an expert in a suit for malpractice. He was kept in the court-room till ten o'clock at night, subject to draughts and changes of temperature. and when he went to his hotel, found he had taken cold. The symptoms of pneumonia rapidly appeared and when he was brought home his condition was hopeless. All

was done for him by his warm friend Dr. Spearman and others, that was possible, but to no purpose. He sank steadily and Monday morning, Jan. 5th, all hope was surrendered. At eleven o'clock p. m. he breathed his last, surrounded by loving friends.

The flag on the capitol was placed at half-mast in respect to the memory of Surgeon-General Wolcott, and universal regret expressed at his sudden death. The following general order was issued:

"STATE OF WISCONSIN, EXECUTIVE OFFICE, MADISON, JAN. 6, 1880.—*General Order No.* 2.—The sad duty is devolved upon the Governor of announcing to the people of Wisconsin, and especially to the officers and men of the Wisconsin National Guard, the sudden and unexpected death of Brig. Gen. Erastus B. Wolcott, M.D., which occurred at his residence in the city of Milwaukee, at 11 o'clock yesterday evening. Gen. Wolcott was born in Benton, Yates county, New York, in October, 1804. He received his diploma as a doctor of medicine in 1825. He was appointed surgeon in the United States army in 1836, and resigned in 1839, and the same year settled in Milwaukee, where he has ever since resided. In 1842 he was appointed surgeon of the territorial militia, by Gov. Doty. In 1846, colonel of a regiment, and in the same year major-general of the first division of Wisconsin militia. At the breaking out of the war of the rebellion, he was appointed to the laborious and responsible office of surgeon-general of the State, and with the exception of a brief interval of about three months, continued in the discharge of the duties of that office, with universal approbation, during the whole period of the war, and until January 5, 1874. On the 11th day of January, 1876, he was again appointed surgeon-general, and continued as such by successive appointments until relieved by death, his last commission having been issued yesterday, in the hope and expectation that his indisposition would be but temporary.

"Although prominent in his chosen profession in general practice as well as in his connection with the army and the Wisconsin militia, it was not alone in these relations that he was known and respected. In 1850 he was appointed a regent of the University

of Wisconsin. In 1860 a trustee of the State Hospital for the Insane, holding for six years. In 1866 a commission to represent Wisconsin at the universal exposition in Paris; and the same year a manager of the National Home for Disabled Volunteer Soldiers, which office he held by reappointment at the date of his death.

"It may be truthfully said of Gen. Wolcott that in all these public positions, and in the wide and possibly more important sphere of a citizen, he was efficient, faithful and zealous. Broad and sympathetic in his views, polished in manner, wise in counsel, vigorous in action, the personification of honor and integrity, his death may well be mourned as a public calamity. In token of respect for his memory, the members of the staff are requested to wear the usual badge of mourning for a period of thirty days from the receipt of this order, and all officers of the Wisconsin National Guard will wear a similar badge during the same period, when in uniform. On the day of his funeral the flag upon the capitol will be displayed at half-mast, and the adjutant general will direct such guards of honor and formal escort to be furnished as may be agreeable to the family and immediate friends of the deceased. (Signed), WM. E. SMITH, Governor."

The members of the Milwaukee County Medical Society, and many of the prominent physicians of Milwaukee, met in the parlors of the Newhall House, and after somewhat extended remarks by several of the gentlemen in regard to the life and services of the late Dr. E. B. Wolcott, adopted the following resolutions:

"WHEREAS, By the will of the Divine Author of Creation, our honored associate, Dr. E. B. Wolcott, has been removed from among us, and the medical society of Milwaukee county has thereby been deprived of one of its valued members, we desire to give expression to our respect, esteem and affection for his memory; therefore,

"Resolved, That we desire as individuals and as a society to record our appreciation of his life and character, of his worth as a scholarly gentleman, and our admiration of his noble qualities of head and heart.

"Resolved, That more than fifty years of professional labor, mostly in the State of Wisconsin, have won for him a wide-spread confidence and many honors justly conferred, and a distinguished place among the surgeons of the country.

"Resolved, That in the life, labor and character of Dr. E. B. Wolcott we have an example of industry, manliness and usefulness, in a high degree commendable and worthy of imitation.

"Resolved, That in the death of Dr. Wolcott this society, the medical profession of this city, and society in general have sustained a great loss.

"Resolved, That this society feel that words are inadequate to express the full sense of this bereavement, but desire to record the estimation in which the deceased was held, whose memory they will cherish with the sincerest affection.

"Resolved, That we tender to the family of Dr. Wolcott our profound sympathy in their bereavement.

"Resolved, That these resolutions be recorded in the minutes of this society, and a copy be sent to the family of the deceased."

The society voted to attend the funeral in a body.

At a meeting of the Milwaukee Academy of Medicine, convened to give expression of sentiment in regard to the recent death of Dr. Wolcott, of this city, the following resolutions were unanimously adopted:

"Resolved, That in the death of Dr. E. B. Wolcott, Surgeon General of the State, the people have lost a true and generous friend, and the profession an elder brother, whose skillful hand was ever extended at the call of distress and suffering, knowing no distinctions of wealth among his patients, no limits save those of honor in his professional associations. The name of our departed friend will ever remain a revered one in Wisconsin homes and medical gatherings. The officers of this society are hereby instructed to communicate to his family this expression of our regard; and to invite the homeopathic physicians of Milwaukee to attend his funeral in a body, as a mark of respect and esteem for one whose heart rose above all distinctions of sect, party, or pathy, and whose last professional act was in defense of a homeopathic physician.

The following general order was issued from Washington, D. C.:

Head-Quarters National Home for Disabled Volunteer Soldiers.
WASHINGTON, D. C., January 6, 1880.

The telegraph brings the mournful news of the death of Manager Erastus B. Wolcott, of Wisconsin.

It is fitting when a good man dies that those associated with him, at least, should pause in their pursuits, in reverence to his memory. It is therefore ordered:

First. That on the day of his funeral, guns shall be fired half-hourly from sunrise until the hour thereof, at each Branch.

Second. That the flags shall be at half-mast from the receipt of this order, including the day of the funeral.

Third. That the several officers of the Home shall wear the usual badge of mourning for thirty days.

Fourth. That on the day of the funeral all ordinary avocations and business shall be suspended.

Fifth. General Hincks is instructed to furnish such escort, and pay such honors to the deceased as may be acceptable to his family, and will, on receipt of this order, give notice to the other Branches of the day and hour of the funeral.

Sixth. This order shall be read to each company in the several Branches by its sergeant on the morning of its reception.

BENJ. F. BUTLER,
President Board of Managers.

OFFICIAL:
EDW. W. HINCKS,
Commandant.

THE post-graduate, or practitioners' courses of medical lectures, in the colleges of this city, are promising well. That at Rush College, now in progress, is well attended by medical gentlemen, who are much pleased with the character of the instruction given. That announced for the Chicago Medical College begins on the 31st of March next, and will doubtless meet with a deserved success.

Items.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES of MEDICAL OFFICERS OF THE UNITED STATES MARINE HOSPITAL SERVICE. *October* 1, 1879, *to December* 31, 1879.

Bailhache, P. H., surgeon, relieved from duty, port of New York, and ordered to Philadelphia, temporarily. Thence to resume his duties as member of the National Board of Health, Oct. 25, 1879.

Hutton, W. H. H., surgeon, relieved from duty, port of New Orleans, and ordered to Detroit. Nov 1, 1879.

Fessenden, C. S. D., surgeon, relieved from duty, port of Portland, Maine, and ordered to New York. Oct. 25, 1879.

Doering, E. J., surgeon, relieved from duty, port of Philadelphia, and ordered to Portland, Maine. Oct. 25, 1879.

Austin, H. W., assistant surgeon, relieved from duty, port of Key West, and ordered to New Orleans. Nov. 1, 1879.

Stoner, G. W., assistant surgeon, relieved from duty, port of Buffalo, and ordered to Philadelphia. Oct. 25, 1879.

Fisher, J. C., assistant surgeon, detailed as chairman of board for the physical examination of candidates for promotion in the revenue marine service, Nov. 20, 1879. Granted leave of absence for nine days from Dec. 19, 1879. Dec. 17, 1879.

Godfrey, John, assistant surgeon, ordered to proceed to New Orleans for temporary duty during illness of surgeon Austin. Dec. 29, 1879.

Goldsborough, C. B., assistant surgeon, detailed as recorder of board for the physical examination of candidates for promotion in the revenue marine service. Nov. 20, 1879.

White, R., jr., assistant surgeon, ordered to Buffalo, Oct. 24,

1879. Orders to Buffalo revoked; ordered to report to surgeon Fessenden, New York, for duty. Nov. 12, 1879.

Irwin, Fairfax, assistant surgeon, upon expiration of leave of absence to proceed to Charleston, S. C. Oct. 31, 1879.

Glazier, W. C. W., assistant surgeon, relieved from duty, port of Charleston, S. C., and ordered to Key West, Fla. Oct. 31, 1879.

Cooke, H. B., assistant surgeon, relieved from duty, port of Pensacola, Fla., and ordered to Buffalo, N. Y. Dec. 1, 1879.

O'Connor, F. J., assistant surgeon, ordered to Philadelphia for temporary duty, Nov. 10, 1879. Ordered to Buffalo, N. Y., for temporary duty, Nov. 12, 1879. When relieved by assistant surgeon Cooke, to rejoin his proper station. Dec. 9, 1879.

Porter, F. D., assistant surgeon, assigned to temporary charge at Detroit Marine Hospital, Oct. 25, 1879. When relieved by surgeon Hutton, to proceed to Chicago and report for duty to Surgeon Miller. Dec. 17, 1879.

PROMOTIONS.

Austin, H. W., surgeon, promoted to be surgeon from Nov. 1, 1879. Nov. 3, 1879.

Gassaway, J. M., passed assistant surgeon, promoted to be passed assistant surgeon. Dec. 12, 1879.

Smith, Henry, passed assistant surgeon, promoted to be passed assistant surgeon. Dec. 12, 1879.

Stoner, G. W., passed assistant surgeon, promoted to be passed assistant surgeon. Dec 12, 1879.

RESIGNATIONS.

Ellinwood, C. N., surgeon, resignation accepted to take effect Oct. 2, 1879. Oct. 2, 1879.

Brown, J. A., surgeon, resignation accepted to take effect Nov. 1, 1879. Nov. 1, 1879.

Dana, C. L., assistant surgeon, resignation accepted to take effect Nov. 15, 1879. Nov. 11, 1879.

ANNOUNCEMENTS FOR THE MONTH.

SOCIETY MEETINGS.

Chicago Medical Society—Mondays, Feb. 2 and 16.
West Chicago Medical Society—Mondays, Feb. 9 and 23.

CLINICS.

MONDAY.

Eye and Ear Infirmary—2 p. m., Ophthalmological, by Prof. Holmes; 3 p. m., Otological, by Prof. Jones.
Mercy Hospital—2 p. m., Surgical, by Prof. Andrews.
Rush Medical College—2 p. m., Dermatological and Venereal, by Prof. Hyde; 3 p. m., Medical, by Dr. Bridge.
Woman's Medical College—3 p. m., Diseases of the Chest, Prof. Ingals.

TUESDAY.

Cook County Hospital—2 to 4 p. m., Medical and Surgical Clinics.
Mercy Hospital—2 p. m., Medical, by Prof. Hollister.

WEDNESDAY.

Chicago Medical College—2 p. m., Eye and Ear, by Prof. Jones.
Rush Medical College—3:30 to 4:30 p. m., Diseases of the Chest, by Dr. E. Fletcher Ingals.

THURSDAY.

Chicago Medical College—2 p. m., Gynæcological, by Prof. Jenks.
Rush Medical College—3 p. m., Diseases of the Nervous System, by Prof. Lyman.
Eye and Ear Infirmary—2 p. m., Ophthalmological, by Dr. Hotz.
Woman's Medical College—3 p. m., Surgical, by Prof. Owens.

FRIDAY.

Cook County Hospital—2 to 4 p. m., Medical and Surgical Clinics.
Mercy Hospital—2 p. m., Medical, by Prof. Davis.

SATURDAY.

Rush Medical College—2 p. m., Surgical, by Prof. Gunn.
Chicago Medical College—2 p. m., Surgical, by Prof. Isham; 3 p. m., Neurological, by Prof. Jewell.
Woman's Medical College—11 a. m., Ophthalmological, by Prof. Montgomery; 2 p. m., Gynæcological, by Prof. Fitch.

Daily Clinics, from 2 to 4 p. m., at the Central Free Dispensary, and at the South Side Dispensary.